Supreme Court, U.S.
FILED
DEC 3 - 2004
OFFICE OF THE CLERK

No. 04-108

In The Supreme Court of the United States

SUSETTE KELO, THELMA BRELESKY, PASQUALE CRISTOFARO, WILHELMINA AND CHARLES DERY, JAMES AND LAURA GURETSKY, PATAYA CONSTRUCTION LIMITED PARTNERSHIP, and WILLIAM VON WINKLE,

Petitioners,

v.

CITY OF NEW LONDON, and NEW LONDON DEVELOPMENT CORPORATION,

Respondents.

On Writ Of Certiorari To The Supreme Court Of Connecticut

JOINT APPENDIX
Volume I, Pages 1 to 212

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Petition For Certiorari Filed July 19, 2004
Certiorari Granted September 28, 2004

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RELEVANT DOCKET ENTRIES

Connecticut Supreme Court
CASE NUMBER SC 16742

Filing Date	Docket Text
12/20/00	Complaint
2/16/01	Answer of Defendants City of New London and New London Redevelopment Agency
2/16/01	Answer of New London Development Corporation
2/21/01	Pretrial Stipulation
3/13/02	Memorandum of Decision
4/1/02	Plaintiffs' Appeal
4/9/02	Cross-Appeal of Defendant New London Development Corporation
4/9/02	Cross-Appeal of Defendants City of New London and New London Redevelopment Agency
5/8/02	Transfer Letter
7/2/02	Brief of Plaintiffs
7/2/02	Statement of the Issues of Plaintiffs
8/1/02	Brief of City of New London
8/1/2	Statement of the Issues of City of New London
8/1/02	Brief of New London Development Corporation
8/1/02	Statement of the Issues of New London Development Corporation
9/3/02	Reply Brief of Plaintiffs

9/20/02	Reply Brief of New London Development Corporation
9/23/02	Reply Brief of City of New London
	* * *
3/11/04	Supreme Court Decision by the Court
3/11/04	Supreme Court Decision by the Court
	* * *
3/29/04	Motion for Reconsideration
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4/20/04	Order Denying Motion for Reconsideration
4/20/04	Order Granting Motion for Stay Pending Decision by United States Supreme Court

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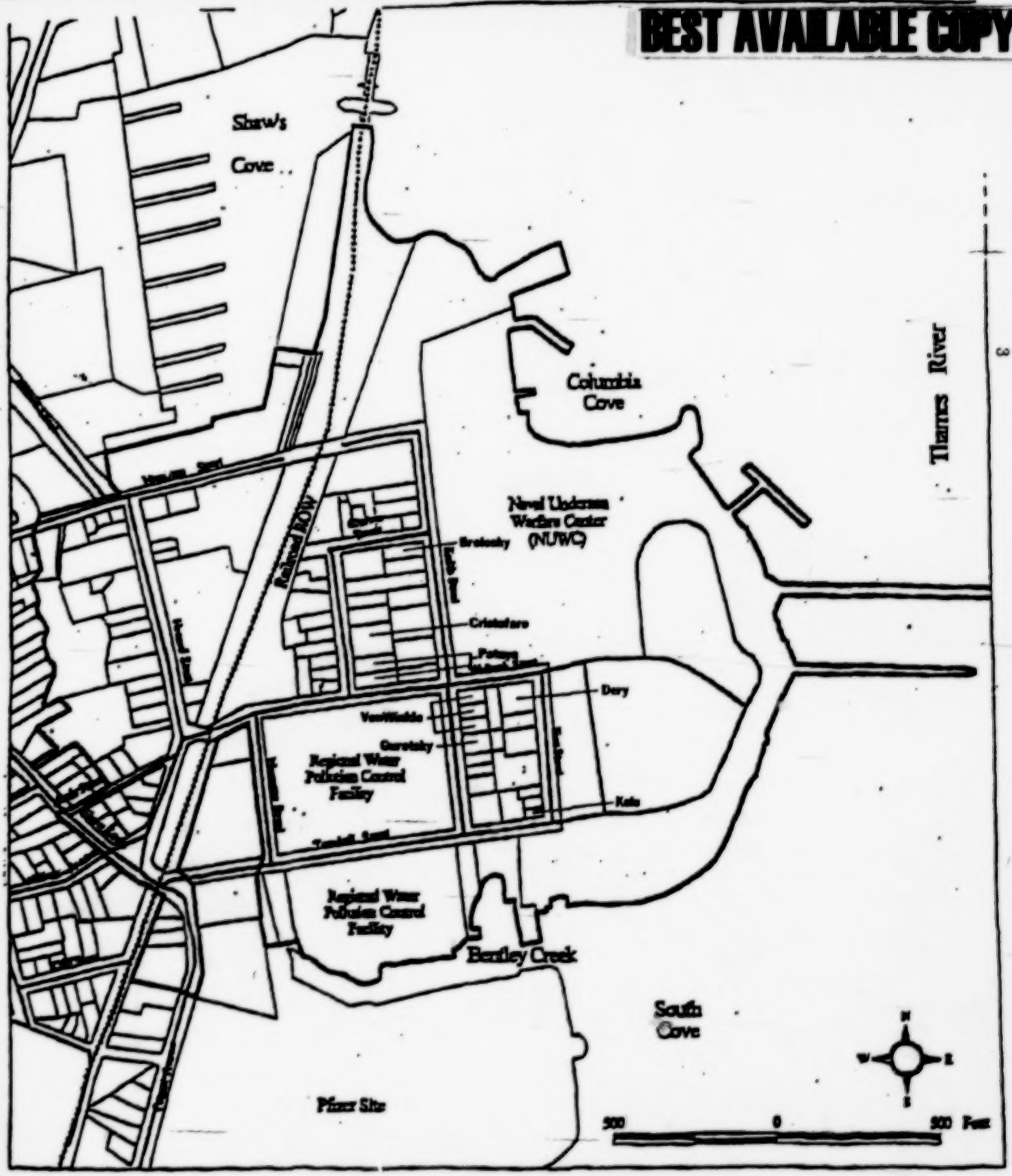
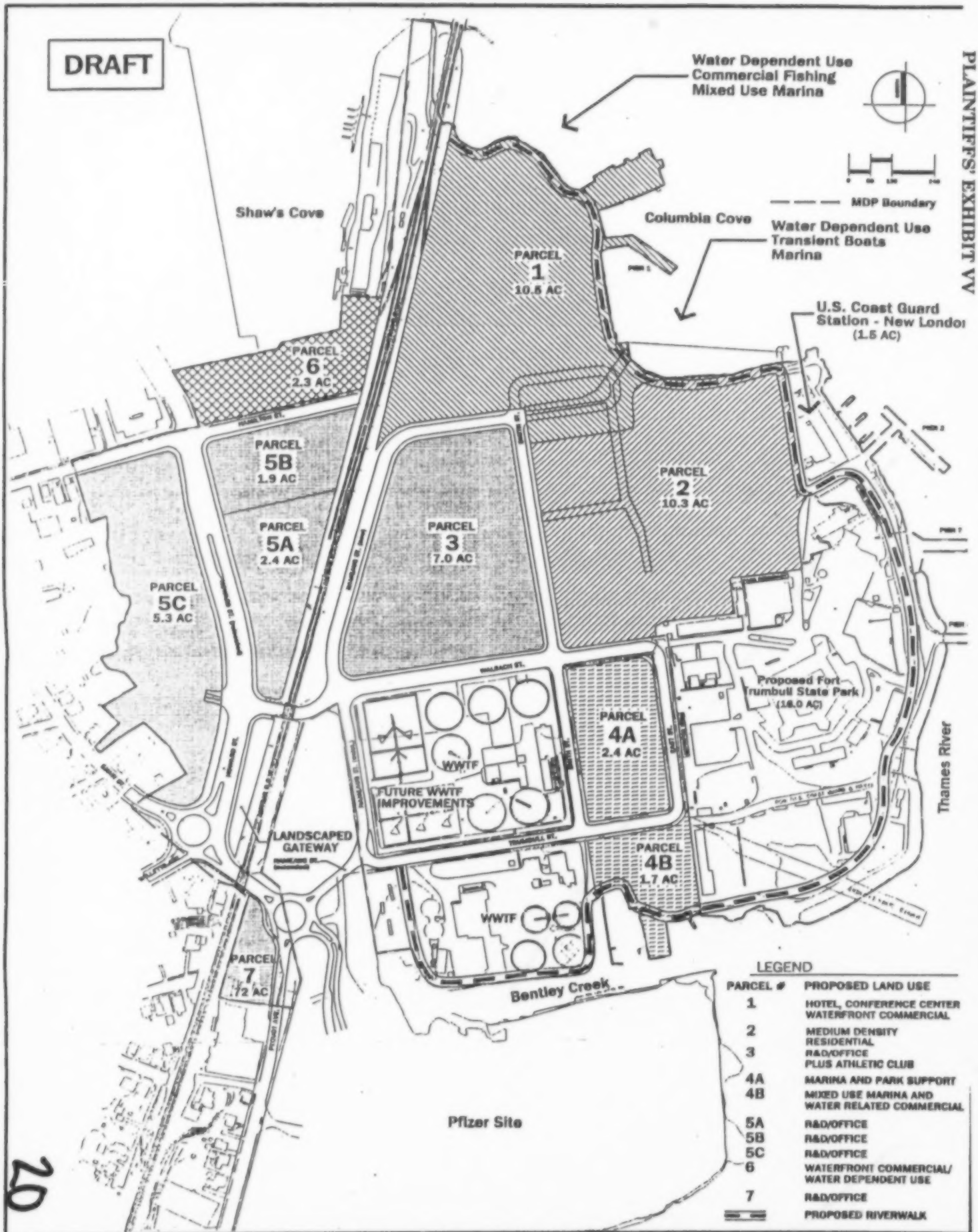


Fort Trumbull MDP Area - New London, Connecticut

Figure 2

PLAINTIFF'S EXHIBIT
TT
Full

MDP Project Boundary



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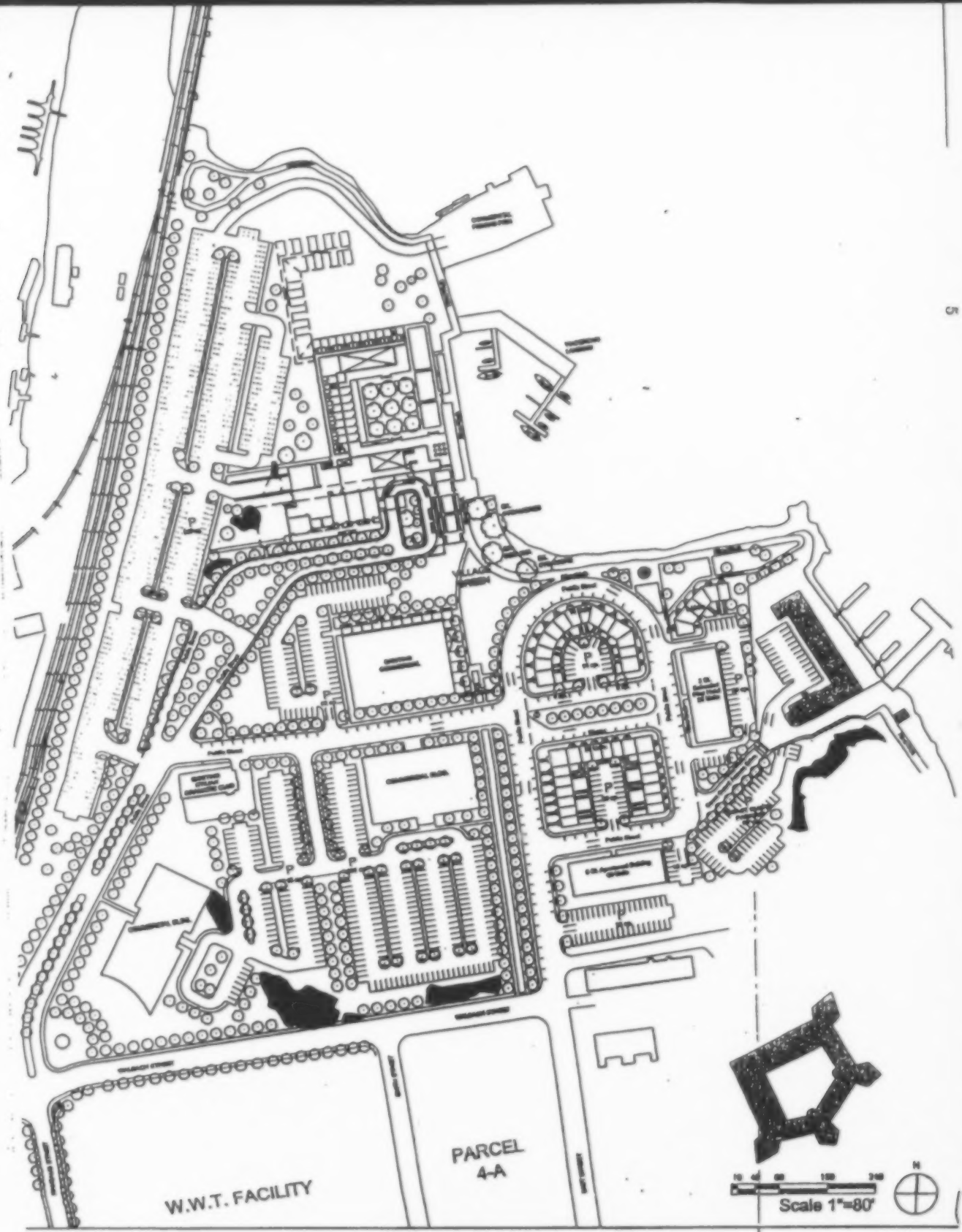
COMPOSITE



Site Plan

Fort Trumbull Development Plan

October 10, 2000

ilison Companies

Associates, Architects

t

PLAINTIFF'S EXHIBIT
YY Full
NO.

LEGEND

- PROPOSED HOTEL UNITS
- PROPOSED HOTEL SUPPORT
- PROPOSED HOTEL LOBBY
- PROPOSED HOTEL RESTAURANT
- PROPOSED HOTEL FITNESS
- PROPOSED HOTEL MEETING
- PROPOSED HOTEL CIRCULATION
- PROPOSED HOUSING
- PROPOSED COMMERCIAL

PLAINTIFFS' EXHIBIT B

NO. RED CV 00-	SUPERIOR COURT
CITY OF NEW LONDON	JUDICIAL DISTRICT OF
V.	NEW LONDON AT
ROSE CIAVAGLIA, WILHEMINA J. DERY aka WILHEMINA DERY and CHARLES DERY	NEW LONDON
	NOVEMBER 6, 2000

STATEMENT OF COMPENSATION

The CITY OF NEW LONDON, acting by and through the NEW LONDON DEVELOPMENT CORPORATION, the Condemner, represents and states:

1. The Condemner is a municipal corporation located in the County of New London and State of Connecticut.

2. The Condemner is acting herein by the NEW LONDON DEVELOPMENT CORPORATION, its duly designated development agency exercising the powers set forth in Chapter 132 of the Connecticut General Statutes.

3. On October 16, 2000, the New London Development Corporation duly voted to acquire the hereinafter described property, and found that the convenience and necessity of the Condemner requires the same, for the purpose and effectuating the Condemner's development project plan.

4. The property to be taken pursuant to this Statement of Compensation is located in the City and County of New London and State of Connecticut, consists of four buildings or residences on one parcel of land known as 28 East Street, 79 Walbach Street, 81-83 Walbach Street and

87 Walbach Street and is more particularly bounded and described in Schedule "A" attached hereto.

5. The names of all persons having a record interest in the property are

ROSE CIAVAGLIA, WILHELMINA J. DERY
aka WILHELMINA DERY and CHARLES DERY
87 Walbach Street
New London, Connecticut

6. The Condemner has determined that the amount of the compensation to be paid to the persons entitled thereto for such property is $506,000.00, and this sum is being deposited with the Clerk of the Superior Court for the Judicial District of New London at New London in accordance with the provisions of Section 8-130 of the Connecticut General Statutes.

CITY OF NEW LONDON, acting by
the NEW LONDON DEVELOPMENT
CORPORATION

By /s/ Edward B. O'Connell
Edward B. O'Connell, of
Waller, Smith & Palmer, P.C.
Its Attorneys

SCHEDULE A

A certain piece or parcel of land, with the buildings and improvements thereon, located in the City and County of New London and State of Connecticut, more particularly described as follows:

Beginning at the southwest corner of Walbach and East Streets and running thence southerly

by and along the westerly side of East Street one hundred sixteen (116) feet, more or less, to land now or formerly of Louis Brabander; thence running westerly by said Brabander land one hundred four and two-tenths (104.2) feet to land now or formerly of Eugene Callaghan; thence northerly by and along said Callaghan land one hundred sixteen (116) feet, more or less, to the southerly side of Walbach Street; thence easterly by and along the southerly side of Walbach Street one hundred eight and twenty-five hundredths (108.25) feet to the point and place of beginning.

PLAINTIFFS' EXHIBIT I

NEW LONDON

DEVELOPMENT CORPORATION

RECORD OF VOTE

At its Board meeting on October 16, 2000, the NLDC passed the following resolutions, copies of which are attached:

Resolution 001016-1
Resolution 001016-2
Resolution 001016-3

The board voted in one new member, and will continue to vote on new members at upcoming meetings. The new member is Judge Antoinete Dupont.

Resolution 001016-1

WHEREAS, the New London City Council has designated the New London Development Corporation, a nonprofit development corporation, as its development agency pursuant to the Connecticut General Statutes, and

WHEREAS, the New London Development Corporation has prepared a project plan for The Fort Trumbull Municipal Development Plan Area pursuant to Section 8-189 of the Connecticut General Statutes, and

WHEREAS, the project plan for The Fort Trumbull Municipal Development Plan Area has been duly approved and adopted pursuant to Section 8-191 of the Connecticut General Statutes, and

WHEREAS, it is necessary to acquire certain properties located in the Fort Trumbull Municipal Development Plan Area of New London in order to carry out and administer said project plan, and

WHEREAS, pursuant to Section 8-193 of the Connecticut General Statutes the New London Development Corporation has the approval of the New London City Council to acquire by eminent domain properties within the Fort Trumbull Municipal Development Plan Area.

NOW, THEREFORE, IT IS RESOLVED that the New London Development Corporation, in the name of the City of New London, acquire certain properties located in the Fort Trumbull Municipal Development Plan Area of New London through the exercise of the power of eminent domain as granted to it under Chapter 132 of the Connecticut General Statutes. Said properties are more particularly described as follows:

ADDRESS	*Map*	*Book*	*Lot*	*Owner*
78 Smith Street	21	106	1	Thelma Brelesky
72 Smith Street	21	106	2	Carolyn A. Luzi
41 Goshen Street	21	106	8	Pataya Const. Ltd Partship
49 Goshen Street	21	106	9	Pataya Const. Ltd Partship
54 Goshen Street	22	107	24	Albert P. Anton
42 Goshen Street	22	107	28	Isabelle M. Rogovin
36 Walbach St.	22	107	30	Isabelle M. Rogovin
82 Trumbull Street	21	105	13	Foss & Bourke, Inc
8 East Street	21	105	11	Suzette T. Kelo

19-23 Smith Street	21	105	17	James R. & Laura A. Guretsky
27 Smith Street	21	105	18	William von Winkle, Trustee
31 Smith Street	21	105	19	William von Winkle, Trustee
33-35 Smith Street	21	105	20	William von Winkle, Trustee
216 Howard Street	22	107	32	William von Winkle, Trustee
189 Howard Street	22	101	20	Antoinette Farrell
195 Howard Street	22	101	21	Lillian M. Del-Grosso, Trustee
53 Goshen Street	21	106	10	Pasquale & Margaerita Cristofaro
79 Walbach Street, 81-83 Walbach St., 87 Walbach Street & 28 East Street	21	105	3	Rose Ciavaglia & Wilhemina & Charles Dery
11-13 Smith Street	21	105	14	Edward & Josephine Johnson

IT IS FURTHER RESOLVED, that the New London Development Corporation take such steps as are necessary to effectuate such acquisition in the manner provided in Sections 8-128 through 8-133 of the Connecticut General Statutes.

CERTIFICATE

I, Garon Camassar, Secretary of the New London Development Corporation, do hereby certify the above resolution was adopted at a meeting of the Board of Directors of the

New London Development Corporation held on October 16, 2000 and that the said resolution is contained in the minutes of said meeting on file in the New London Development Corporation office, 165 State Street, Suite 313, New London, Connecticut, and that it has not been modified nor rescinded whatsoever.

Attest:

/s/ Garon Camassar — 10/16/00
Garon Camassar, Secretary — Date
New London Development Corporation

NEW LONDON

DEVELOPMENT CORPORATION

NLDC BOARD RESOLUTION 001016-2

Whereas, the Fort Trumbull Municipal Development Plan was approved on January 18, 2000 by the New London Development Corporation, and subsequently approved by the City Council and the Connecticut Department of Economic and Community Development, and

Whereas, the Corcoran Jennison Companies were selected to develop a proposal for Municipal Development Plan Parcels 1, 2, and 3 in accordance with the Municipal Development Plan proposed land uses, and present their proposed plans for the designated parcels, and

Whereas, a preliminary plan depicting the layout and uses of the site was presented by Corcoran Jennison Companies on October 10, 2000,

It is hereby resolved that the Board of Directors of the New London Development Corporation approves and concurs with the preliminary plan for the layout and uses of Parcels 1, 2, and 3 of the Fort Trumbull Municipal Development Plan as set forth in the Corcoran Jennison Plan dated October 10, 2000.

CERTIFICATE

I, Garon Camassar, Secretary of the New London Development Corporation, do hereby certify the above resolution was adopted at a meeting of the Board of Directors of the New London Development Corporation held on October 16, 2000 and that the said resolution is contained in the minutes of said meeting on file in the New London Development Corporation office, 165 State Street, Suite 313, New London, Connecticut, and that it has not been modified nor rescinded whatsoever.

Attest:

_____ _____

Garon Camassar, Secretary Date
New London Development Corporation

NEW LONDON

DEVELOPMENT CORPORATION

NLDC BOARD RESOLUTION 001016-3

Whereas, the Fort Trumbull Municipal Development Plan Map 3.8 (Proposed Streets) details proposed streets in the Fort Trumbull Municipal Development Plan Area, and

Whereas, the Fort Trumbull Municipal Development Plan Map 5.1 (Proposed Land Uses) details the land uses proposed for the Fort Trumbull Municipal Development Plan area, including the land uses for Parcels 1, 2, and 3 in accordance with that plan, and

Whereas, a preliminary plan dated October 10, 2000 was presented by Corcoran Jennison that details land uses consistent with the Fort Trumbull Municipal Development Plan in terms of use, intensity, and location; such plan being received and approved by the Board of the New London Development Corporation on October 16, 2000, and

Whereas, the Fort Trumbull Municipal Development Plan states that "More specific traffic and street plans will be developed based upon . . . further refinement of development plans of the MDP area," and

Whereas, said refinements are consistent with and not substantial modifications of the Municipal Development Plan,

Now therefore, It is hereby resolved that the Board of Directors of the New London Development Corporation approve the attached Map 5.1A and 5.1B as supplemental documents to Map 5. 1 and Map 3.8 which more particularly set forth descriptions of Parcels 1, 2, and 3 and proposed streets.

It is further resolved, that the following text changes be made to retain consistency with the plan as modified by the supplemental maps:

Page 5-1;

- Proposed Land Uses for Parcel 1: add reference to "***health club and fitness facility***" to description of hotel/conference center complex.

Page 5-2;

- Parcel 2; change parcel size to 6 acres. Add reference to "***This parcel will also accommodate approximately 25 extended stay hotel units.***" Delete reference to Coast Guard Museum.
- Parcel 3; change parcel size to 11 acres. Delete reference to health club complex.

Pages 5-24, 5-28, 5-29, 5-32, and 5-33;

- Change references describing the principal pedestrian spine, Village Green access, and division between residential and office parcels from "Smith Street" to "***East Street***."

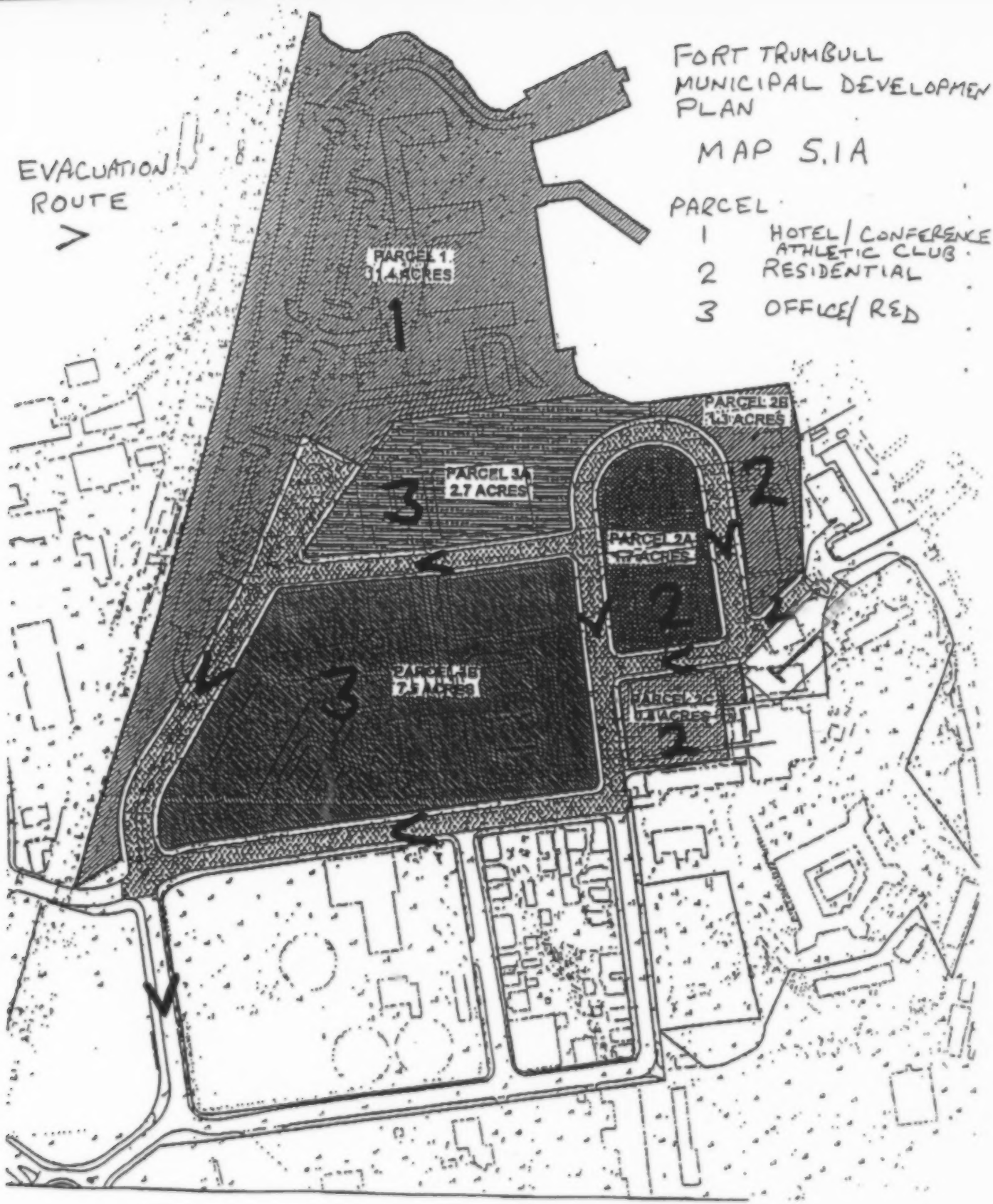
CERTIFICATE

I, Garon Camassar, Secretary of the New London Development Corporation, do hereby certify the above resolution was adopted at a meeting of the Board of Directors of the New London Development Corporation held on October 16, 2000 and that the said resolution is contained in the minutes of said meeting on file in the New London Development Corporation office, 165 State Street, Suite 313, New London, Connecticut, and that it has not been modified nor rescinded whatsoever.

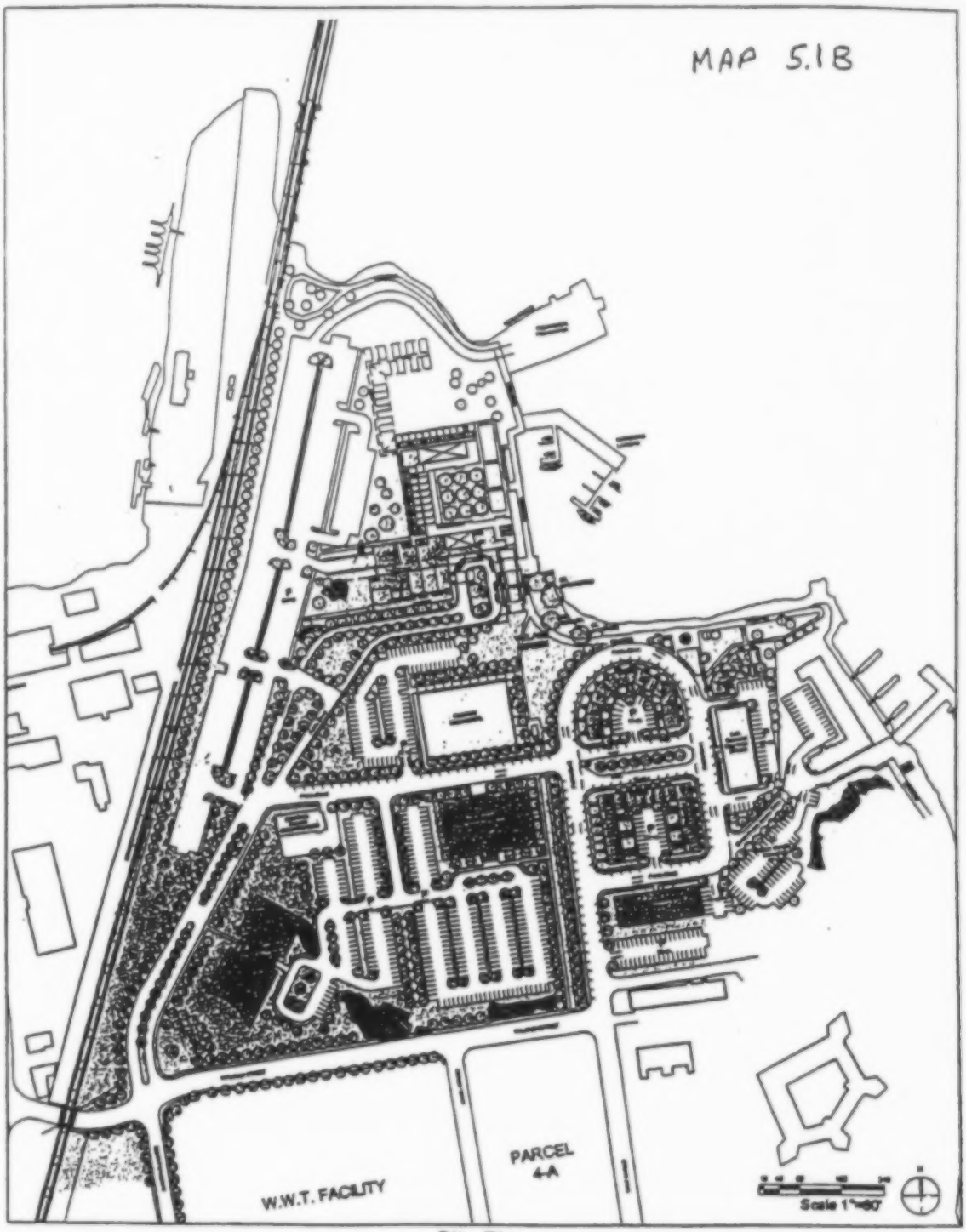
Attest:

_____ _____

Garon Camassar, Secretary Date
New London Development Corporation


FORT TRUMBULL
MUNICIPAL DEVELOPMEN
PLAN
MAP 5.1A
PARCEL
1 HOTEL / CONFERENCE ATHLETIC CLUB
2 RESIDENTIAL
3 OFFICE / RED
EVACUATION ROUTE
PARCEL 1
31.4 ACRES
PARCEL 2B
1.3 ACRES
PARCEL 3A
2.7 ACRES
PARCEL 2A
PARCEL 3B
PARCEL 2C
1.3 ACRES

MAP 5.1B



Site Plan

Fort Trumbull Development Plan

October 10, 2000

Corcoran Jennison Companies

William Rawn Associates, Architects
101 Tremont Street
Boston, MA
02108

LEGEND

PLAINTIFFS' EXHIBIT II

New London Development Corporation
181 Broad Street, New London, CT 06320

December 15, 1997

George M. Milne, Jr.
President
Pfizer Central Research
Groton, CT 06340

Dear George:

The directors of the New London Development Corporation are pleased to make the commitments outlined below to enable you to decide to construct a Pfizer Central Research facility in New London. This commitment is presented in conjunction with the State of Connecticut and the City of New London.

We have been working with the renowned firm of Wallace, Roberts and Todd to design a land plan to ensure that the new Pfizer facility will be the centerpiece of a concentrated reuse of the area surrounding the former New London Mills (see Appendix A). In addition to your facility the project includes the development of the state's fourth biotechnology incubator, the refurbishment of historic Fort Trumbull, the reuse of the vacant Naval Underwater Warfare Center and the development of mixed retail and residential space that will be fully integrated into the surrounding neighborhoods of the City of New London. In order to achieve these goals, it will be necessary to relocate the Calamari Bros. scrap dealer, upgrade utilities and infrastructure, and acquire a number of surrounding properties.

Based on the commitments from the state (see Appendix B) and city (see Appendix C), the New London Development Corporation will:

1. *Calamari Bros.* – Acquire and perform environmental testing on this site which will serve as the entry way to the research facility. The status of negotiations are summarized in Appendix D. Environmental testing would be needed on the current site and would require funding. The cleanup costs of any contaminants found on the site prior to its transfer to Pfizer will be identified as part of the testing program and funds made available subsequent to the conclusion of testing.

2. *Surrounding Properties* – Residential and commercial properties in the area including abandoned buildings and vacant lots will be acquired for integration into the overall design plan. Every effort will be made to ensure the highest and best use of all properties. Consideration will also be given to improvements to the approaches and access points to the site along Howard Street and other roads. Appendix E describes estimated costs and the manner in which options will be acquired and the purchases executed.

3. *Fort Trumbull State Park* – Some of the sites mentioned in paragraph "2" above will be utilized in the development of Fort Trumbull State Park. Appendix F outlines the Connecticut Department of Environmental Protection's timetable and plan.

4. *Utilities and Infrastructure Upgrades* – Utilities and infrastructure in the project area will require upgrades in order to guarantee utilities consistent with the requirements of the new facilities. See Appendix G.

5. *Biotechnology Incubator* – The proximity to the Pfizer research facility creates a tremendous opportunity to create another asset – a new biotechnology incubator facility. The mission of this organization will be to support the early phase development of biotechnology firms until they are successful enough to move to permanent locations elsewhere in Connecticut. The location in the project area will be a significant positive attribute in recruiting startup ventures to this facility. Site acquisition costs and methods are outlined with other properties in Appendix E. Additional funding will be needed for construction or renovation of buildings and relocation of current tenants.

6. *Former Naval Underwater Warfare Center* – The portion of this site, excluding Fort Trumbull State Park and land occupied by the United States Coast Guard Station New London will be acquired from the Department of Defense as described in Appendix I.

Thank you very much for your consideration of this proposal. We will work with you to refine this proposal to meet Pfizer's requirements. We will also work closely with you at the appropriate time to plan an announcement that is befitting the magnitude of this project.

Cordially,

/s/ Claire L. Gaudiani
Dr. Claire L. Gaudiani
President

CLG:dcb
97-667-2

PLAINTIFFS' EXHIBIT PP1

Serbia, James

From: Serbia, James
Sent: Wednesday, October 21, 1998 1:42 PM
To: Milne, George M
Subject: Ft. Trumbull MDP

Importance: High

Dr Milne (Questions shown in red and CAPS)

I have left for you 3 drawings depicting some the latest concept plans that NLDC has put together. There seems to be some confusion regarding the expectation that Pfizer (you in particular) has regarding development of the peninsula (Something I know you have heard before – bear with me). This confusion has caused some friction between NLDC and DECD/DEP.

NLDC indicates that an original conceptual plan put together by Wallace Roberts Todd (WRT) was used at two key meetings – one involving you/state/city/NLDC and the other being the CMC meeting (IS THIS YOUR RECOLLECTION?). NLDC indicates that this plan represents "the commitment" to Pfizer. The State feels that "the commitment" is more along the lines of what is outlined in the letters from DECD to Pfizer.

I think what it boils down to is whether or not Pfizer is flexible regarding the development plans – I believe the answer is yes per all of our previous discussions on this – as long as some key components are included:

– a residential component which would be attractive to professionals

– a hotel/conference component

– treatment plant upgrades/state park/etc and commercial or retail development to make the area an attractive place to visit/work.

DOES THIS SOUND ABOUT RIGHT?

The State, from a public policy perspective, has difficulty in supporting residential areas located in a floodplain, and in condemning/taking an existing residential area and replacing it with a more upscale residential district. They do indicate that they can accomodate an upscale residential component, but that they would have some difficulty if this portion of the development became substantial.

Can you clarify the following:

1. WOULD APPROXIMATELY 70-80 HIGH END RESIDENTIAL UNITS FIT WITH YOUR EXPECTATION?

2. THE LARGEST HOTEL AREA THAT IS CURRENTLY SHOWN ON ANY OF THE PLANS IS FOR 250 UNITS. THIS SEEMS LOW TO ME. HIGH, LOW, OR OK?

3. YOU MENTIONED THAT I SHOULD KEEP AN EYE OUT REGARDING PLANS FOR AN AMPHITHEATER. THE ORIGINAL WRT PLAN SHOWED ONE, BUT IT DOESN'T APPEAR THAT THIS IS STILL IN THE PLANS. IS IT SOMETHING YOU WOULD LIKE TO SEE OR IS IT SOMETHING WE WOULD PREFER NOT BE INCLUDED IN THE DEVELOPMENT?

Thanks for your help and patience.

Jim

PLAINTIFFS' EXHIBIT PP2

Central Research Division
Pfizer Inc
Eastern Point Road
Groton, CT 06340
Tel 860 441 4844 Fax 860 441 6204

(LOGO)

Central Research

George M. Milne, Jr., Ph.D.
President

March 8, 1999

Dr. Claire Gaudiani
President, New London Development Corporation
Connecticut College
270 Mohegan Avenue
New London, CT 06320

Dear Claire:

On behalf of Pfizer Inc., I am pleased to affirm my support of the New London Development Corporation's application for an Economic Development Conveyance for the Naval Undersea Warfare Center (NUWC) property.

Pfizer Inc is a research-based global health care company that discovers, develops, manufactures, and markets innovative medicines for both humans and animals. This will be the headquarters for Central Research, Pfizer's R&D Division, based in Southeastern, Connecticut. We are building a $270 million Global Development Facility (GDF) in New London to open by October 1, 2000. This facility will employ more than 2,000 Ph.D.s, M.D.s and other scientists, researchers, and clinical specialists. Our New London expansion requires the world class redevelopment planned for the adjacent 90 acres in the Fort

Trumbull Municipal Development plan including the 16 acres of the NUWC property.

The Fort Trumbull area is integral to our corporate facility and to the plan for the revitalization of New London to a world class standard. The Amended Reuse Plan will provide a waterfront hotel with about 200 rooms, a conference center and physical fitness area, extended-stay residential units and 80 units of housing. We will use the proposed hotel and conference facility as an extension of our facility committing to 100 of those rooms on a daily basis for visiting international staff and other professionals. In addition we require conference space and are exploring a "virtual" Pfizer University to keep our researchers up to date on the most recent breakthroughs in biotechnology. The extended stay housing will provide for researchers who often stay for periods of up to 3-6 months. Year round quality housing is also crucial to recruiting top scientists. The waterfront residential neighborhood envisioned provides a one-of-a-kind housing option desired by many of our employees. As a result, the NUWC property is and has been key to our investment in the area.

We are prepared to enter into agreements with the NLDC and developers to build the type of facilities we require, but this is not just about Pfizer. The plan developed by the NLDC is intended to transform New London and is destined, we believe, to become a model for high impact, high value public/private partnerships. We have also requested the NLDC to expedite the development as quickly as possible to meet our schedule and the OpSail 2000 target for the unveiling of the new, New London. The transfer of NUWC and the completion of the developments proposed in the Amended Reuse Plan are fundamental to the

success of these efforts and of our Global Development Facility in New London.

We greatly appreciate the assistance of the Department of the Navy in making the Fort Trumbull and NUWC redevelopment a national example of which we may all be proud.

Sincerely,

/s/ George M. Milne, Jr., Ph.D.

cc: Governor John G. Rowland, State of Connecticut
Timothy West, Mayor City of New London

DEFENDANTS' EXHIBIT 12

MINUTES OF THE CITY COUNCIL OF NEW LONDON

1/18/00 – 6

7.8 Fort Trumbull Municipal Development Plan

Upon motion of Councilor Burdick, seconded by Councilor Curtin, it was voted 6-1: To approve resolution number 011800-3 concerning the New London City Council approving the Fort Trumbull Municipal Development Plan and making certain findings. The Clerk reads the resolution by title only, all Councilors having copies, and the subject resolution is adopted by Roll Call Vote. Those voting in favor: Burdick, Pero, West, Curtin, Nossek, Hewett. Those voting against: Beachy.

RESOLUTION NUMBER 011800-3

Certified Resolution

By the **NEW LONDON CITY COUNCIL** approving the Fort Trumbull Municipal Development Plan and making certain findings.

WHEREAS, it is desirable and in the public interest that the **New London Development Corporation** prepare a Development Plan for a Municipal Development Project for purposes of contributing to the economic welfare of the municipality and the state pursuant to the provisions of Chapter 130, Chapter 132 and Chapter 588(1) of the Connecticut General Statutes as amended; and

WHEREAS, the **New London Development Corporation** prepared a Development plan for the project known

as the **Fort Trumbull Municipal Development Plan**; and

WHEREAS, the Fort Trumbull Municipal Development plan was referred to the **Planning and Zoning Commission of the City of New London** and the regional planning agency known as the **Southeastern Connecticut Council of Governments Regional Planning Commission**; and

WHEREAS, thereafter the **New London Redevelopment Agency** held a public hearing on the Fort Trumbull Municipal Development Plan on January 13, 2000, pursuant to the provisions of local law, state statutes, Chapter 130 of the Connecticut General Statutes, as amended, and thereafter approved said Plan; and the **New London Development Corporation** held a public hearing on the Fort Trumbull Municipal Development Plan on January 13, 2000, pursuant to the provisions of local law, state statues, Chapter 132 and Chapter 588(1) of the Connecticut General Statutes, as amended, and thereafter, approved said plan;

NOW THEREFORE, the New London City Council hereby resolves:

(1) That the Fort Trumbull Municipal Development Plan is hereby approved;

(2) That the land and buildings within the Fort Trumbull Municipal Development Plan project area will be used principally for industrial, business, housing and recreational uses; that the land and buildings within the boundaries of the Project Area will be used primarily for economic base business purposes or business support services; and that the Plan is essential to the purpose of redevelopment of the area;

(3) That the Fort Trumbull Municipal Development Plan is in accordance with the City of New London Plan of Conservation and Development, and that it is in accordance with the Plan of Development for the Southeastern Connecticut Council of Governments Regional Planning Commission;

(4) That the Fort Trumbull Municipal Development Plan is not inimical to any statewide planning program objectives of the state or state agencies as coordinated by the Secretary of the Office of Policy and Management;

(5) That the Fort Trumbull Municipal Development Plan project will contribute to the economic welfare of the City of New London and the State of Connecticut; and

(6) That to carry out and administer the project, public action under Chapters 130, 132 and 588(1) of the Connecticut General Statutes as amended is required; and, for the purposes of carrying out this project, that the New London City Council approves and bestows upon the New London Development Corporation all rights and powers that are permitted to accrue to a development agency or implementing agency under Chapters 130, 132, and 588(1) of the Connecticut General Statutes as amended, including the power of eminent domain with the project area in the name of the City of New London per Chapter 130, Section 8-128, and Chapter 132, Section 8-193.

(7) That all properties in the Fort Trumbull Municipal Development Plan listed as "to be acquired" shall be acquired prior to December 31, 2002, unless this date is extended by the City Council.

(8) That the Chief Operating Officer of the New London Development Corporation is hereby authorized to submit the resolution of approval of the Fort Trumbull Municipal Development Plan as approved by the New London City Council to the Connecticut Department

of Economic and Community Development for approval.

Upon motion of Councilor Pero, seconded by Councilor Curtin, it was unanimously voted: To recess the meeting at 12 midnight.

Attest: /s/ Michael J. Tranchida
Michael Tranchida, Assistant City Clerk

grm

PLAINTIFFS' EXHIBIT HHH

MEMO

CORCORAN JENNISON COMPANY, INC.

DATE: **JANUARY 12, 2001**

TO: **JOSEPH E. CORCORAN**
GARY JENNISON
SCOTT DUMONT
HARRY NASH
ELIZA EDELSBERG

FROM: **MARTY JONES**

RE: **COMMERCIAL OFFICE STUDY ON NEW LONDON**

Here is the commercial office study prepared by Jay Hooper on New London. We need a document for NLDC to show we are working on this. Please give me your comments. We plan to seek brokers in February to keep the community aware the deal is moving forward.

Harry is working on a detailed analysis of Building 2 systems which will be added to update the cost side of the proforma.

CORCORAN JENNISON COMPANIES, INC.

MARKETING PLAN

FOR

COMMERCIAL DEVELOPMENT SPACE

Fort Trumbull Development

New London, CT

Corcoran Jennison Companies, Inc.
150 Mount Vernon Street, Suite 500
Boston, MA 02125

Table of Contents

1. Project Description
2. Market Study Summary
3. Commercial Development Program
4. Financial Feasibility Study of Commercial Development
5. Conclusions of Financial and Market Study
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7. Marketing Strategy
8. Marketing Execution Plan
9. Project and Marketing Schedule
10. Marketing Budget
11. Addenda
    - Sample Draft of Broker Request for Proposals
    - New London Office Absorption History (Miner & Silverstein Appraisal Company)
    - Comparable Office Lease Data

Project Description

Background

The New London Development Corporation (NLDC), in association with the Connecticut Department of Economic and Community Development (DECD), has undertaken a municipal planning project targeting an area adjacent to the Thames River in New London, Connecticut. Known as the Fort Trumbull Municipal Development Plan (MDP), the MDP area encompasses approximately 90 acres immediately south of downtown New London and adjacent to historic Fort Trumbull, which has been developed into a

state park. The principal catalyst for development in this area is the construction of Pfizer Inc.'s 790,000-square-foot Global Development Facility immediately south of the MDP area. This facility is the headquarters for Pfizer's worldwide research operations.

The NLDC selected Corcoran Jennison Companies as the developer of a 30-acre waterfront parcel adjacent to Fort Trumbull. The majority of the parcel consists of the U.S. Navy's closed Naval Undersea Warfare Center (NUWC). The balance is made up of an aging working class neighborhood and an Amtrak rail yard.

Project Description

Corcoran Jennison Companies has proposed a mixed-use development, to include a four-star hotel, housing, and commercial space, for the 30-acre parcel. The attached site plan, labeled the Fort Trumbull Development Plan, depicts the latest proposed development plan for the Fort Trumbull site. New public roadways and infrastructure will be built to support the development. Total development costs are projected to be approximately $100 million.

The hotel will be situated on the northernmost section of the site. The residential development will be located on the southeastern portion of the site, adjacent to the existing Coast Guard rescue station facility and north of Fort Trumbull. The commercial development will be located on the southwestern portion of the site; an existing Italian Dramatic Club located here will be kept and incorporated into the development plan. Plans also include the "Riverwalk" a waterfront park along the shoreline. It will connect to the Fort Trumbull State Park, and provide

opportunities for the general public to walk, bike and picnic along the water.

Hotel/Conference Center

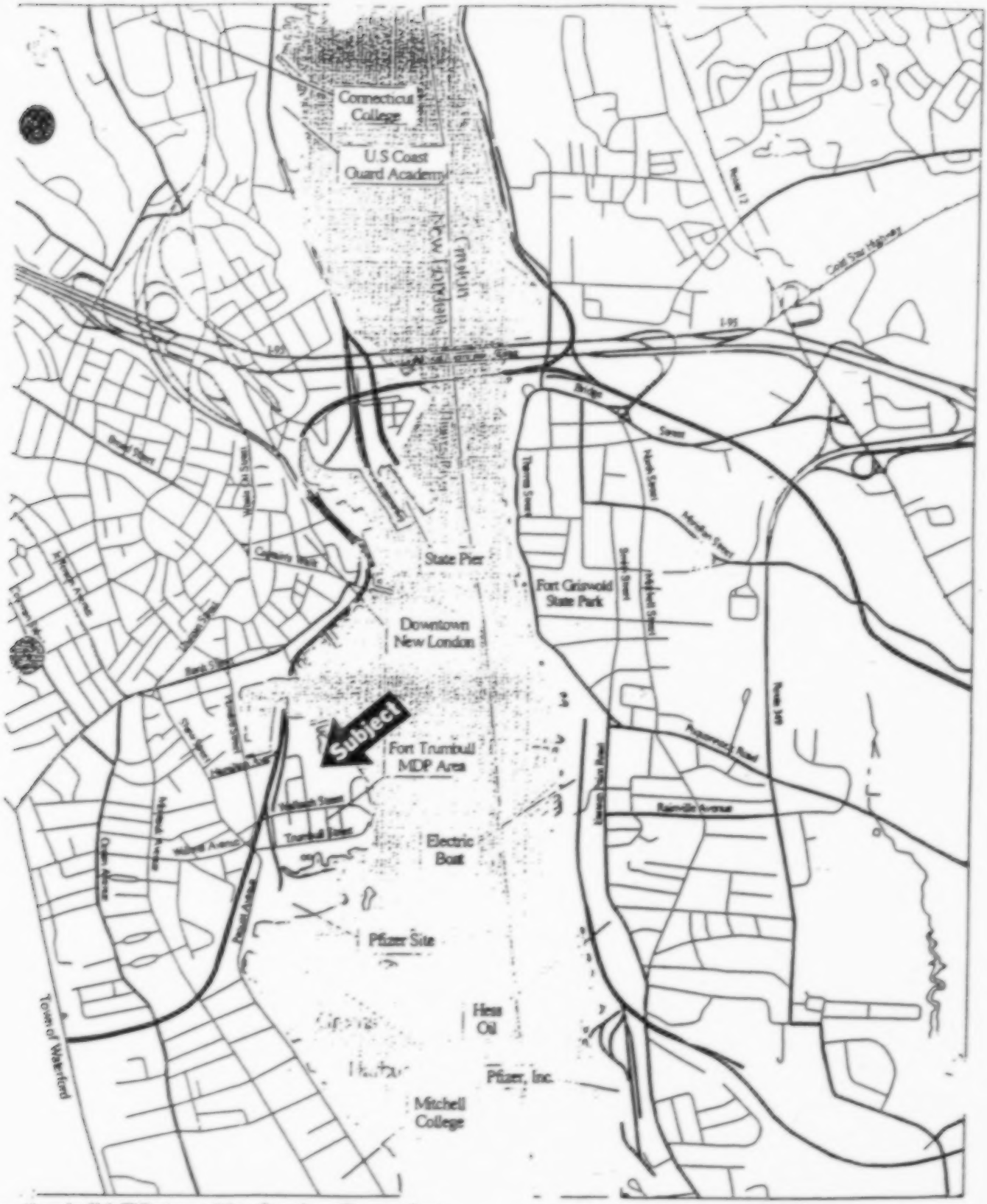
The proposed hotel development is a key component to the overall transformation of the Fort Trumbull area. An extension of Nameaug Street, to be built as a tree-lined boulevard, will be the gateway to the hotel, leading guests from Walbach Street to the hotel. The planned hotel will be built in two phases and will consist of 225 rooms, a 12,000 square foot of conference/meeting facility, and a restaurant when completed. Construction will commence on the first phase of 100 rooms as soon as possible, which is anticipated to be August 2001. The hotel will be designed with considerable green space around it, as well as lots of glass to take advantage of sweeping views of the Thames River, Long Island Sound, and downtown New London.

Residential

The proposed residential development consists of a three-story, 24-unit extended stay inn with furnished apartments; a six-story, 48-unit apartment building; and 40 two- and three-story townhouses arranged in three traditional urban clusters near the cove. The residential development will be used to focus activity toward the water. The Riverwalk, which will be a dedicated public pedestrian and bicycle path that runs along the water's edge and connects the Fort Trumbull development with Fort Trumbull State Park and the Pfizer development, will be a valuable amenity for the residential development.

Commercial

At present, approximately 300,000 square feet of commercial space is envisioned for the site. This will be comprised of an existing commercial building containing approximately 91,000 gross square feet, identified as Building 2 by the U.S. Navy, and two proposed buildings of 100,000 square feet each. The MDP called for the inclusion of office or bioscience-related commercial space. While the new buildings could be developed for either use depending upon market conditions, the existing Building 2 is best utilized for office use given its current construction. Building 2 is a four-story, steel frame, brick and glass structure completed in 1991 as sonar research and development space for the Navy. It is in reasonably good condition and can be easily renovated to Class A office space for the New London market. The new buildings will be sited between Building 2 and Walbach Street and will be developed as market conditions warrant.



rt Trumbull MDP Area - New London, Connecticut
raft Environmental Impact Evaluation - November 1998

as GIS coverages developed by Milone & MacBroom, --
, and HMA, Inc. Sources include Connecticut DEP,
ty of New London, FEMA, and US Navy. Intended for planning

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Figure 1.1-2
Project Location Map

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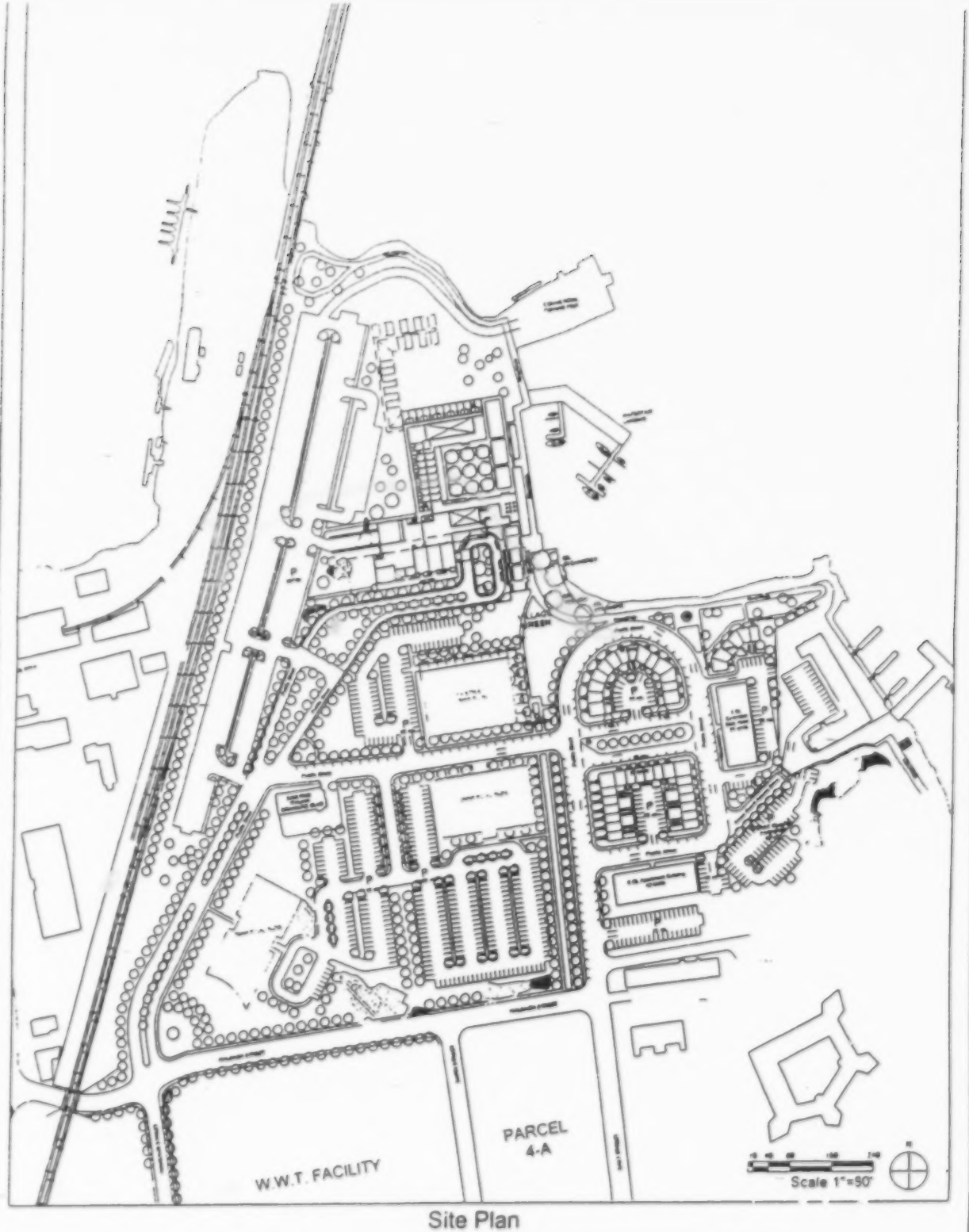


Site Plan

Fort Trumbull Development Plan

October 10, 2000

Corcoran Jennison Companies

William Rawn Associates, Architects
101 Tremont Street
Boston, MA
02108

LEGEND

- PROPOSED HOTEL UNITS
- PROPOSED HOTEL SUPPORT
- PROPOSED HOTEL LOBBY
- PROPOSED HOTEL RESTAURANT
- PROPOSED HOTEL FITNESS
- PROPOSED HOTEL MEETING
- PROPOSED HOTEL CIRCULATION
- PROPOSED HOUSING
- PROPOSED COMMERCIAL

Market Study Summary

OFFICE MARKET

The New London commercial real estate market is continuing its recovery from the last recession of the early 1990s. While rental rate and occupancy trends have been generally positive over the past few years, market values are still well below replacement cost and new construction is generally not feasible. As a result, little new construction has taken place over the last decade in the New London area. The following discussion provides a summary of the New London commercial/office market. The chart on the following page presents a snapshot of the New London office market as of October 2000.

Supply

New London contains approximately 815,000 square feet of Class A and B office space, with approximately 545,000 square feet considered Class A and approximately 270,000 considered Class B. Most of New London's Class A space was built in the 1980s. Roughly one-half of the Class A space is located in Shaw's Cove Business Park, which currently consists of six buildings containing approximately 275,000 square feet. Shaw's Cove is located between downtown New London and the Fort Trumbull development. The vast majority of the Class B space is located in downtown New London.

New construction activity in the market has been minimal and generally limited to end-user/owner-occupant facilities, such as the new space under construction for Pfizer. There are two proposed developments of Class A space that are commonly mentioned in the marketplace, one in

New London and one in nearby Groton. These developments are as follows:

Shaw's Cove 7 & 8, New London

- Proposed 60,000 to 70,000 s/f in 2 buildings
- Developer – Julian Enterprises
- No pre-leasing activity to date
- Asking $20.00 Gross
- Considering ground floor retail due to greater demand
- U.S. Properties, Inc. – marketing/leasing agent

Mystic Executive Park, Groton

- Proposed 104,000 s/f
- 4 Stories (26,000 s/f floorplates)
- Located at Exit 88 off Rt. 95 adjacent to Marriott Hotel under construction
- Developer – Wolman's/Waterford Hotel Group
- No pre-leasing activity to date
- Asking $23.00 Gross (includes basic tenant improvements)
- CB Richard Ellis – marketing/leasing agent

NEW LONDON OFFICE MARKET SURVEY
October 2000
Source: U.S. Properties, Inc.

		Property	Address	Built	Size (S/F)	Available S/F	Vacancy	Rate	Comments
Class A	**1**	Shaw's Cove One		1984	12,492	-	0.0%		
	1	Shaw's Cove Two		1986	31,228	790	2.5%	$20.00 Gross	
	1	Shaw's Cove Three		1988	70,286	8,300	11.8%	$20.00 Gross	
	1	Shaw's Cove Four		1988	32,731	-	0.0%		Medical Building
	1	Shaw's Cove Five		1989	37,114	2,155	5.8%	$20.00 Gross	
	1	Shaw's Cove Six		1990	89,000	2,841	3.2%	$20.00 Gross	
	2	Columbus Corner	470 Bank Street	1989	21,632	-	0.0%		
	3	Mariner Square	125 Eugene O'Neill Dr.	1982	84,000	1,000 *	1.2%	$20.00 Gross	26,000 s/f for sublease
	4	Citizens Bank	63 Eugene O'Neill Dr.		37,414	1,400	3.7%	$14.00 NNN	
	5	194 Howard Street		1984	47,000	-	0.0%		
	6	Union Plaza 1 & 2		1968	52,480	4,000	7.6%		
	7	400 Bayonet Street		1987	30,617	4,800	15.7%	$19.00 + Elec.	
		Subtotal			**545,994**	**25,286**	**4.6%**		
Class B	**8**	A & T Technical	238-258 Bank Street		58,518	21,000	35.9%	$12.00 NNN	
	9	Columbus Park	Howard Street	1988	25,000	1,300	5.2%	$13.50 Gross	
	10	Harris Place	165 State Street	1885	66,354	13,985	21.1%	$14.00 + Elec.	
		Manwaring Building	225 State Street		25,848	25,848	100.0%	$14.00 + Elec.	
		Exchange Building	190 Governor Winthrop	1935	41,000	26,950	65.7%	$11.00 + Elec.	
		Dewart Building	State Street	1914	43,896	43,896	100.0%	N/A	Temporarily off market
		19 Jay Street			9,300	9,300	100.0%	$14.00 NNN	
		Subtotal			**269,916**	**142,279**	**52.7%**		
Class A & B Totals					**815,910**	**167,565**	**20.5%**		

* - Excludes sublease space

Another proposed development that could impact the New London market is the planned development of the former Norwich State Hospital, located north of New London in Norwich, CT. A master plan was recently unveiled for turning the 470-acre site into a 3 million square foot office park. No prospective tenants have been announced, although discussions reportedly have occurred in the past with Pfizer. Spaulding & Slye Colliers is marketing this site.

While New London has limited land available for new commercial construction, some additional parcels will be made available in the Fort Trumbull MDP area for development subsequent to the development of the Fort Trumbull site. Additionally, the surrounding region has abundant land available for commercial development should future market conditions warrant it.

Based on conversations with people connected with the proposed office developments, replacement cost for new office development is estimated to be between $120 and $150 per square foot, depending upon construction, type of parking, etc.

Demand

As can be seen in the preceding chart, although the overall market exhibits a 20.5% vacancy rate, the Class A market is quite healthy, with only 4.6% of the Class A space not leased. If the 26,000 square feet available for sublease in Mariner Square were included, then the Class A vacancy rate would rise to 9.4%, which is still not an unhealthy level for the market.

The Class B market, on the other hand, is clearly struggling with over half of the space presently unoccupied. Brokers, however, report that much of the Class B space is functionally obsolete and has inadequate and/or inaccessible parking, which exacerbates the vacancy level.

A report published by Miner & Silverstein Appraisal Company (see Addenda) indicates that there has been positive demand for Class A & B office space over the past four years. Between October 1996 and October 1999, approximately 185,000 square feet were absorbed in New London. As of November 1999, Miner & Silverstein had forecast additional absorption of approximately 25,000 square feet through mid-2000; based on market information provided by U.S. Properties, actual absorption through October 2000 appears to have exceeded this projection.

Brokers indicate that typical tenants in the market require between 3,000 and 7,500 square feet of space. While there are some requirements between 10,000 and 20,000 square feet, reportedly there are relatively few above 20,000 square feet. Given the relative size of the New London market, this would appear reasonable.

Typical office tenants in the New London market include the "Main Street" mix of lawyers, accountants, and medical practitioners, as well as other service-oriented companies, community organizations, and government agencies. Some of the larger users in New London are Pfizer, General Dynamics, CSC (Computer Science Corp.), and Ortronics. Ortronics, which reportedly recently tripled in size to 36,000 square feet, is in the telecommunications and structured cable industry.

It should be noted that over the past few years, Pfizer has represented one of the largest sources of demand in the southeastern Connecticut region, buying or leasing large blocks of space outside of its Groton campus and its New London campus that is under construction. Reportedly, Pfizer will remain in the vast majority of this space as it occupies its new Global Development Facility being built in New London.

According to local brokers and business people, New London has experienced limited organic growth, aside from Pfizer, in recent years. In addition, the region has experienced very limited growth as a result of companies relocating to the area to be proximate to Pfizer or other companies. Nonetheless, one source of future demand for commercial space may be the result of companies doing business with Pfizer that desire proximity to the new Global Development Facility. Brokers have noted a few inquiries from companies representative of Pfizer-related demand, but no significant demand has been evidenced over the past several years.

Rental Pricing

Recent leases for Class A office space in New London show rents ranging between $18.00 and $21.00 per square foot, on a gross basis with the tenant only paying for the additional cost of janitorial cleaning within the leased premises. A summary of comparable lease data over the past three years has been included in the Addenda for reference purposes. Lease terms are typically between 5 and 10 years, with smaller tenants sometimes wanting 1- to 3-year terms and larger tenants sometimes executing 15-year terms.

Tenant improvement allowances vary based on recent deals. With the market tightening, some deals have been done with no or minimal (painting and carpet cleaning) tenant improvements. On the other hand, some deals in Shaw's Cove Business Park have had tenant improvement allowances around $15.00 to $17.00 per square foot.

Operating Expenses

Brokers indicate that operating expenses, including real estate taxes and utilities, for office buildings in New London generally vary between $6.00 and $7.00 per square foot. Of this amount, real estate taxes generally range between $1.00 and $2.00 per square foot. Typical real estate taxes for buildings in Shaw's Cove are between $1.70 and $2.00 per square foot. Utilities usually comprise between $1.50 and $2.00 per square foot, with the balance reflecting common area and other operating expenses.

Sale Prices

Recent sales of office buildings in New London have ranged between roughly $40 and $70 per square foot. The two most recent sales of larger Class A buildings sold for prices ranging between approximately $57 and $67 per square foot. The only office buildings currently being marketed for sale are Class B properties with asking prices ranging between $26 and $63 per square foot.

BIOTECH/BIOSCIENCE MARKET

The biotech/bioscience market is in its infancy in Connecticut. Aside from Pfizer, a biotech/bioscience market does not really exist in the New London area. Connecticut

is promoting a bioscience cluster concept, with New Haven, Hartford, and New London being the three locations targeted for developing the cluster concept. Although New Haven is making some progress in attracting bioscience companies, New London and Hartford have not had any meaningful success to date.

New Haven has two major developments either underway or proposed. One is Science Park, an 80-acre master planned site that will include renovation and new construction of office, laboratory, and research and development space. Lyme Properties has recently been selected to take over development of the project, which will be in excess of 1 million square feet. The other development is the Hamden Bioscience Campus, a proposed 1 million square foot park for biotech/bioscience companies.

The general impression in the market is that, at this time, it is difficult for New London to compete with New Haven for biotech/bioscience users. New London has a competitive disadvantage in that it lacks a major university that grants post-graduate degrees and a major research hospital, as well as significant venture capital money to support emerging companies. SECTER, a southeastern Connecticut business recruitment organization, indicates that they have been unable to generate any interest for bioscience in the New London area for the past few years.

With development costs for bioscience space generally in a broad range between $250 and $350 per square foot, depending on the tenant improvements required, it is not economically feasible to develop this space at this time without an end user in hand that will pay the rent necessary to support the cost. Ultimately, corporate or government sponsorship will be required to create a feasible

environment for development of biotech/bioscience space in New London. Connecticut Innovations, a state-sponsored agency, has a $40 million Bioscience Facilities Fund to support development of biotech, wet laboratory space. To date, reportedly $20 million have been committed, almost entirely for companies in the New Haven area. Funds are mainly for tenant improvement loans and residual balance guarantees for lenders, and have yet to be used to fund speculative real estate development.

Commercial Development Program

The commercial development program for the Fort Trumbull development will consist of at least two phases, and possibly more depending upon the amount and type of demand that is generated for the 200,000 square feet of proposed commercial space. The first phase of commercial development will involve the renovation and redevelopment of the existing Navy Building 2 into a multi-tenant Class A office building for the New London market. Future phases will involve new construction of either Class A office space or biotech/bioscience space, as demand warrants. The present plan for the proposed commercial space includes the development of two 100,000 square foot buildings along Walbach Street, south of the existing Building 2.

Phase 1 – Office

Building 2 was built in 1991 and consists of a four-story, steel-frame brick and glass office building containing 91,000 gross square feet. Preliminary analysis indicates an approximate net rentable area of 86,000 square feet. The building was constructed for single-tenant occupancy

and will require renovation to accommodate multi-tenant occupancy as appropriate for the New London office market. A first-floor lobby will need to be added, as well as common area on each floor depending upon the space requirements of future tenants. Also, the entrance to the building is currently on the east side and most likely will need to be relocated to orient it to the street grid planned for the Fort Trumbull development. In designing the space for multi-tenant occupancy, it should be kept in mind that loss factors for common area, as generally accepted and paid for by tenants, typically do not exceed 15%.

Building systems will need to be evaluated to determine their appropriateness for reuse. It is known that a heating system will need to be added because Building 2 was previously heated by a system supporting several other Navy buildings. Also, analysis will need to be completed to determine whether the existing elevator and rest rooms are adequate for multi-tenant office use in the current market, or whether additions are required.

Parking will be provided around the building, with excess parking for the near future provided on the adjacent land that will support the future commercial development. It is anticipated that parking will be provided at market-oriented levels, approximately 3.5 spaces per 1,000 square feet of rentable area.

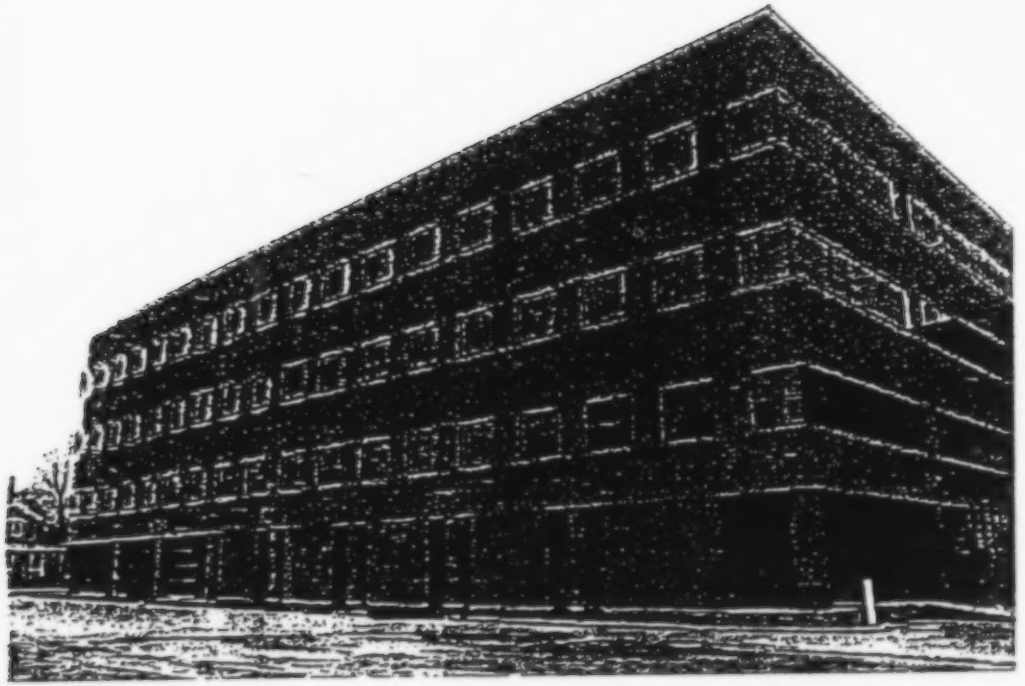
Future Phases – Office and/or Bioscience

The program for the future phases is uncertain and will depend upon the type and quantity of demand that is generated through marketing efforts. It is currently envisioned that there will be two 100,000 square foot buildings, most probably multi-story buildings. Given the

uncertainty regarding the demand/feasibility of biotech/bioscience space, as well as the fact that any additional office development, in all likelihood, will be subsequent to completion of Building 2, any design should be kept flexible to accommodate various types of demand.

If biotech/bioscience space is programmed, the typical product type involves single or multi-story space with floor heights between 18 and 20 feet, wet lab improvements (sinks, cabinets, and hoods), animal areas, filtration systems, a small amount of office area, high HVAC capacity, and heavy floor load capacity.

Consideration should be given to initially programming a good quality "flex"-type building that could be expanded in phases as demand warrants. This building would most likely be one story and would have the look and feel of an office building. However, it would have high floor heights (20 +/- feet) to accommodate a variety of uses, such as office, research and development, laboratory, and assembly. Depending upon the interest generated through broker marketing efforts, a small initial phase of 15,000 to 20,000 square feet could be built to test the market. This strategy would allow for less upfront investment than pure biotech/bioscience space, enhancing the potential feasibility, and would help compensate for the uncertain demand at this time.



Navy Bldg. 2.

Financial Feasibility Study Of Commercial Development

In analyzing the feasibility of the commercial development space at Fort Trumbull, we have focused on the renovation of Building 2. Considering market conditions, as well as anticipated development costs and net operating income levels, new construction of office and/or biotech/bioscience space is not feasible at this time.

On the following pages, three scenarios are presented for the renovation of Building 2. Each scenario involves a different level of cost for the rehabilitation. A summary of the major assumptions for each scenario is as follows:

	Minor Rehab	Moderate Rehab	Major Rehab
Total Development Cost	$5,094,339	$6,737,530	$8,664,291
Per S/F	$59.24	$78.34	$100.75
Hard Costs (Per S/F)	$38.22	$51.95	$70.63
Soft Costs (Per S/F)	$18.06	$22.48	$25.08
Construction Period	4 months	6 months	6 months
Lease-up Period	20 months	18 months	18 months
Market Rent	$16.00	$20.00	$20.00
Equity Required	$652,310	$105,581	$2,032,342
Unleveraged			
Return on Development Cost	13.9%	16.1%	12.0%
IRR (3-year Hold)	20.7%	30.3%	12.0%
Leveraged			
Return on Equity	33.8%	318.7%	16.6%
IRR (3-year Hold)	46.1%	95.0%	10.2%

As illustrated, all three scenarios indicate the general economic feasibility of redeveloping Building 2 given current and anticipated future market conditions. This analysis presupposes that the remainder of the Fort Trumbull development proceeds as planned and that Building 2 is not an isolated development.

FORT TRUMBALL
Building 2 Feasibility Analysis
Development Assumptions

MINOR REHAB

Gross Area	91,000	s/f	Market Rent	$16.00	Per s/f
Rentable Area	86,000	s/f	Operating Expenses	$7.25	Per s/f (base year)
			Capital Reserve	$0.30	Per s/f
Initial Equity	$500,000		Stabilized Vacancy	10.0%	
Permanent Equity	$652,310				
			Permanent Financing		
Construction Period	4	Months	Mortgage Interest Rate	9.25%	
Lease-up Period	20	Months	LTV Ratio	70%	
			Amortization	25	Years
Valuation at Sale			Cap Rate – Financing	11.5%	
Cap Rate	12.0%				
Sale Costs	5.0%				

Preliminary Development Cost Budget

	Amount	Per S/F	%	Comments
Hard Costs				
Building	$ 1,820,000	$20.00		On Gross Area
Site	$ 450,000			
Tenant Improvements	$ 860,000	$10.00		On Rentable Area
Contingency	$ 156,500		5.0%	
Subtotal	**$ 3,286,500**	**$38.22**		
Soft Costs				
Design/Engineering	$ 180,000			
Permits/Insurance	$ 49,298		1.5%	
Legal/Professional	$ 75,000			
General, Admin. & Overhead	$ 100,000			
Taxes/Fees	$ 20,000			
Financing Costs	$ 72,000		2.0%	$3,600,000 Loan Estimate for Calculation
Marketing/Leasing	$ 430,000	$5.00		
Concessions/Free Rent	$ -			
Construction Interest	$ 462,500			$2,500,000 Average Balance for 24 Months
Miscellaneous/Contingency	$ 164,325		5.0%	
Subtotal	$ 1,553,123	$18.06	47.3%	
Development Fee	**$ 254,717**		**5.0%**	
Total Development Cost	**$ 5,094,339**	**$59.28**		
Development Period NOI	$ 856,203			
Net Development Cost	**$ 4,238,136**	**$49.28**		

Capital Sources

Permanent Financing	$ 3,585,826		70.4%
Equity	$ 652,310		12.8%
Development Period NOI	$ 856,203		16.8%
Total Development Cost	**$ 5,094,339**	**$59.24**	**100.0%**

FORT TRUMBULL
Building 2
Pro Forma – Commercial Development Feasibility **MINOR REHAB**

	Year 0	Year 1	Year 2	*Stabilization* Year 3	Comments
Development Costs	$ (254,717)	$ (3,820,755)	$ (1,018,868)		
	5%	75%	20%		
Development Period NOI		$ 181,303	$ 674,900		
Net Development Cost	$ (254,717)	$ (3,639,451)	$ (343,968)	$	
Gross Potential Rent				$ 1,376,000	Level Rent for First 5 Years of Lease
Allowance for Vacancies				$ (137,600)	
Effective Gross Rent				1,238,400	
Operating Expenses				$ (623,500)	Pass Through Increases Over Base Year
Capital Reserve				$ (25,800)	
Net Operating Income				$ 589,100	
Return on Development Cost				**13.9%**	
Add Back Constr. Int. & Financing		$ 267,250	$ 267,250		
Net Sale Proceeds				$ 4,868,478	
Unleveraged Development Cash Flow	$ (254,717)	$ (3,372,201)	$ (76,718)	$ 5,455,578	
Internal Rate of Return	20.7%				

Leveraged Analysis

	Year 0	Year 1	Year 2	*Stabilization* Year 3
Initial Equity Investment	$ (254,717)	$ (245,283)		
Cash Out (In) – Perm. Financing			$ (152,310)	
Net Operating Income				$ 589,100
Permanent Debt Service				$ (368,500)
Debt Coverage Ratio				1.60
Cash Flow after Debt Service				$ 220,600
Return on Equity				**33.8%**
Net Sale Proceeds after Debt				$ 1,319,065
Net Equity Cash Flows	$ (254,717)	$ (245,283)	$ (152,310)	$ 1,539,665
Equity IRR	46.1%			

FORT TRUMBULL
Building 2
Supporting Calculations **MINOR REHAB**

Stabilized Value Estimate

	Amount	Per S/F
Stabilized NOI	$ 589,100	$ 6.85
Cap Rate	11.5%	
Value Estimate	$ 5,122,609	$ 59.57

Permanent Financing

Estimated Value for Financing	$ 5,122,609	
LTV Ratio	70%	
Permanent Loan	$ 3,585,826	$ 41.70
Interest Rate	9.25%	
Amortization	25	
Annual Debt Service	$ 368,500	
Debt Coverage Ratio	1.60	

Excess Cash Flow from Permanent Financing

Permanent Loan	$ 3,585,826
Net Development Costs	$ 4,238,136
Cash Flow from Financing	$ (652,310)
Initial Equity	$ 500,000
Cash Out (In) from Financing	$ (152,310)

FORT TRUMBALL
Building 2
Occupancy/Absorption Projections

MINOR REHAB

Floor	Tenant	Rentable Square Feet	Lease Term	Year 1 – Month 1	2	3	4	Building Opening 5	6	7	8	9	10	11	12	Year 2 – Month 1	2	3	4	5	6	7	8	9	10	11	12
1	1	7,600	7							7,600																	
	2	7,500	6												7,600												
	3	7,750	7																7,750								
2	4	22,750	10										22,750														
3	5	4,500	6													4,500											
	6	4,500	6																				4,500				
	7	4,500	7																								4,500
	8	4,800	7					4,500																			
	9	4,750	6																4,750								
4	10	10,000	10																					10,000			
	11	-	7																								4,000
	12	4,000	6							-																	
	13	3,750	5					3,760																			
Totals		$80,000		-	-	-	-	8,260	-	7,600	-	-	22,750-		7,600	4,500	-	-	12,600	-	-	4,500	-	10,000	-	-	8,600
Cumulative				-	-	-	-	8,260	8,260	16,750	15,750	15,750	38,600	38,500	46,000	50,500	50,500	50,500	63,000	63,000	63,000	67,500	67,500	77,500	77,500	77,500	80,000
Occupancy Rate				0.0%	0.0%	0.0%	0.0%	9.6%	9.0%	10.3%	10.3%	10.3%	44.8%	44.8%	53.6%	58.7%	58.7%	80.7%	73.3%	73.3%	73.3%	78.5%	78.5%	90.1%	90.1%	90.1%	100.0%

Average Occupancy Year 1	27.1%	8 Months
Average Occupancy Year 2	70.0%	12 Months
Average Occupancy During Lease-Up	87.0%	20 Months

Development Period NOI

[Illegible]	Year 1	Year 2	
Market Price	$16.00	$16.00	Per s/f
Operating Expenses (Stabilized)	$7.25	$7.25	Per s/f
Expense Percentage in Lease-Up	60%	80%	
Operating Expense (Lease-Up)	$4.36	$6.80	Per s/f
Net Market Price	$11.05		
Net Market Price – Monthly	$0.97	$0. 6	
Average S/F Occupied	23,344	66,167	
Number Months of Occupancy	8	12	
Development Period NOI	$181,303	$874,900	
Total Development Period NOI		$856,203	

FORT TRUMBALL
Building 2 Feasibility Analysis
Development Assumptions

MODERATE REHAB

Gross Area	91,000	s/f	Market Rent	$20.00	Per s/f
Rentable Area	86,000	s/f	Operating Expenses	$7.25	Per s/f (base year)
			Capital Reserve	$0.30	Per s/f
Initial Equity	$500,000		Stabilized Vacancy	10.0%	
Permanent Equity	$105,581				
			Permanent Financing		
Construction Period	6	Months	Mortgage Interest Rate	9.25%	
Lease-up Period	18	Months	LTV Ratio	70%	
			Amortization	25	Years
Valuation at Sale			Cap Rate – Financing	11.5%	
Cap Rate	12.0%				
Sale Costs	5.0%				

Preliminary Development Cost Budget

	Amount	Per S/F	%	Comments
Hard Costs				
Building	$ 2,730,000	$30.00		On Gross Area
Site	$ 450,000			
Tenant Improvements	$ 1,075,000	$12.50		On Rentable Area
Contingency	$ 212,750		5.0%	
Subtotal	**$ 4,467,750**	**$51.95**		
Soft Costs				
Design/Engineering	$ 250,000			
Permits/Insurance	$ 67,016		1.5%	
Legal/Professional	$ 75,000			
General, Admin. & Overhead	$ 100,000			
Taxes/Fees	$ 20,000			
Financing Costs	$ 120,000		2.0%	$6,000,000 Loan Estimate for Calculation
Marketing/Leasing	$ 430,000	$5.00		
Concessions/Free Rent	$ -			
Construction Interest	$ 647,500			$3,500,000 Average Balance for 24 Months
Miscellaneous/Contingency	$ 223,388		5.0%	
Subtotal	$ 192,904	$22.48	43.3%	
Development Fee	**$ 336,877**		**5.0%**	
Total Development Cost	**$ 6,737,530**	**$78.34**		
Development Period NOI	**$ 1,161,601**			
Net Development Cost	**$ 5,575,929**	**$64.84**		

Capital Sources

Permanent Financing	$ 5,470,348		81.2%
Equity	$ 105,581		1.6%
Development Period NOI	$ 1,161,601		17.2%
Total Development Cost	**$ 6,737,530**	**$78.34**	**100.0%**

FORT TRUMBULL
Building 2
Pro Forma – Commercial Development Feasibility **MODERATE REHAB**

	Year 0	Year 1	Year 2	*Stabilization* Year 3	Comments
Development Costs	$ (336,877)	$ (5,053,148)	$ (1,347,506)		
	5%	75%	20%		
Development Period NOI		$ 222,034	$ 939,567		
Net Development Cost	$ (336,877)	$ (4,831,113)	$ (407,939)	$ -	
Gross Potential Rent				$ 1,720,000	Level Rent for First 5 Years of Lease
Allowance for Vacancies				$ (172,000)	
Effective Gross Rent				1,548,000	
Operating Expenses				$ (623,500)	Pass Through Increases Over Base Year
Capital Reserve				$ (25,800)	
Net Operating Income				$ 898,700	
Return on Development Cost				**16.1%**	
Add Back Constr. Int. & Financing		$ 383,750	$ 383,750		
Net Sale Proceeds				$ 7,424,043	
Unleveraged Development Cash Flow	$ (336,877)	$ (4,447,363)	$ (24,189)	$ 8,322,743	
Internal Rate of Return	30.3%				

Leveraged Analysis

	Year 0	Year 1	Year 2	*Stabilization* Year 3
Initial Equity Investment	$ (336,877)	$ (163,123)		
Cash Out (In) – Perm. Financing			$ (394,419)	
Net Operating Income				$ 898,700
Permanent Debt Service				$ (562,165)
Debt Coverage Ratio				1.60
Cash Flow after Debt Service				$ 336,535
Return on Equity				**318.7%**
Net Sale Proceeds after Debt				$ 2,012,296
Net Equity Cash Flows	$ (336,877)	$ (163,123)	$ 394,419	$ 2,348,832
Equity IRR	95.0%			

FORT TRUMBULL
Building 2
Supporting Calculations **MODERATE REHAB**

Stabilized Value Estimate

	Amount	Per S/F
Stabilized NOI	$ 898,700	$ 10.45
Cap Rate	11.5%	
Value Estimate	$ 814,783	$ 90.87

Permanent Financing

Estimated Value for Financing	$ 7,814,783	
LTV Ratio	70%	
Permanent Loan	$ 5,470,348	$ 63.61
Interest Rate	9.25%	
Amortization	25	
Annual Debt Service	$ 562,165	
Debt Coverage Ratio	1.60	

Excess Cash Flow from Permanent Financing

Permanent Loan	$ 5,470,348
Net Development Costs	$ 5,575,929
Cash Flow from Financing	$ (105,581)
Initial Equity	$ 500,000
Cash Out (In) from Financing	$ (394,419)

FORT TRUMBALL
Building 2
Occupancy/Absorption Projections

MODERATE REHAB

Floor	Tenant	Rentable Square Feet	Lease Term	Year 1 – Month 1	2	3	4	Building Opening 5	6	7	8	9	10	11	12	Year 2 – Month 1	2	3	4	5	6	7	8	9	10	11	12
1	1	7,600	7							7,500																	
	2	7,500	6												7,600												
	3	7,750	7																7,750								
2	4	22,750	10										22,750														
3	5	4,500	6													4,500											
	6	4,500	6																			4,500					
	7	4,500	7																								4,500
	8	4,800	7							4,500																	
	9	4,750	6																4,750								
4	10	10,000	10																					10,000			
	11	-	7							-																	
	12	4,000	6																								4,000
	13	3,750	5							3,750																	
Totals		$80,000		-	-	-	-	-	-	15,750	-	-	22,750	-	7,600	4,500	-	-	12,600	-	-	4,500	-	10,000	-	-	8,600
Cumulative				-	-	-	-	-	-	15,750	15,750	15,750	38,500	38,500	46,000	50,500	50,500	50,500	63,000	63,000	63,000	67,500	67,500	77,500	77,500	77,500	80,000
Occupancy Rate				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	10.3%	10.3%	44.8%	44.8%	53.6%	58.7%	58.7%	80.7%	73.3%	73.3%	73.3%	78.5%	78.5%	90.1%	90.1%	90.1%	100.0%

Average Occupancy Year 1	33.0%	6	Months
Average Occupancy Year 2	70.0%	12	Months
Average Occupancy During Lease-Up	62.3%	18	Months

Development Period NOI

[Illegible]	Year 1	Year 2	
Market Price	$20.00	$20.00	Per s/f
Operating Expenses (Stabilized)	$7.25	$7.25	Per s/f
Expense Percentage in Lease-Up	60%	80%	
Operating Expense (Lease-Up)	$4.35	$8.80	Per s/f
Net Market Price	$15.55	$14.20	Per s/f
Net Market Price – Monthly	$1.30	$1.18	Per s/f
Average S/F Occupied	20,375	66,167	
Number Months of Occupancy	8	12	
Development Period NOI	$222,034	$830,607	
Total Development Period NOI		$1,161,601	

FORT TRUMBALL
Building 2 Feasibility Analysis
Development Assumptions

MAJOR REHAB

Gross Area	91,000	s/f	Market Rent	$20.00	Per s/f
Rentable Area	86,000	s/f	Operating Expenses	$7.25	Per s/f (base year)
			Capital Reserve	$0.30	Per s/f
Initial Equity	$500,000		Stabilized Vacancy	10.0%	
Permanent Equity	$2,032,342				
			Permanent Financing		
Construction Period	6	Months	Mortgage Interest Rate	9.25%	
Lease-up Period	18	Months	LTV Ratio	70%	
			Amortization	25	Years
Valuation at Sale			Cap Rate – Financing	11.5%	
Cap Rate	12.0%				
Sale Costs	5.0%				

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Preliminary Development Cost Budget

	Amount	Per S/F	%	Comments
Hard Costs				
Building	$ 3,185,000	$35.00		On Gross Area
Site	$ 450,000			
Tenant Improvements	$ 2,150,000	$25.00		On Rentable Area
Contingency	$ 289,250		5.0%	
Subtotal	**$ 6,074,250**	**$70.63**		
Soft Costs				
Design/Engineering	$ 250,000			
Permits/Insurance	$ 91,114	1.5%		
Legal/Professional	$ 75,000			
General, Admin. & Overhead	$ 100,000			
Taxes/Fees	$ 20,000			
Financing Costs	$ 110,000		2.0%	$5,500,000 Loan Estimate for Calculation
Marketing/Leasing	$ 430,000	$5.00		
Concessions/Free Rent	$ -			
Construction Interest	$ 777,000			$4,200,000 Average Balance for 24 Months
Miscellaneous/Contingency	$ 303,713		5.0%	
Subtotal	$ 2,156,826	$25.08	35.5%	
Development Fee	**$ 433,215**		**5.0%**	
Total Development Cost	**$ 8,664,291**	**$100.75**		
Development Period NOI	**$ 1,161,601**			
Net Development Cost	**$ 7,502,690**	**$87.24**		

Capital Sources

Permanent Financing	$ 5,470,348		63.1%
Equity	$ 2,032,342		23.5%
Development Period NOI	$ 1,161,601		13.4%
Total Development Cost	**$ 8,664,291**	**$100.75**	**100.0%**

FORT TRUMBULL
Building 2
Pro Forma – Commercial Development Feasibility **MAJOR REHAB**

	Year 0	Year 1	Year 2	*Stabilization* Year 3	Comments
Development Costs	$ (433,215)	$ (6,498,218)	$ (1,732,858)		
	5%	75%	20%		
Development Period NOI		$ 222,034	$ 939,567		
Net Development Cost	$ (433,215)	$ (6,276,184)	$ (793,291)	$	
Gross Potential Rent				$ 1,720,000	Level Rent for First 5 Years of Lease
Allowance for Vacancies				$ (172,000)	
Effective Gross Rent				1,548,000	
Operating Expenses				$ (623,500)	Pass Through Increases Over Base Year
Capital Reserve				$ (25,800)	
Net Operating Income				$ 898,700	
Return on Development Cost				**12.0%**	
Add Back Constr. Int. & Financing		$ 443,500	$ 443,500		
Net Sale Proceeds				$ 7,424,043	
Unleveraged Development Cash Flow	$ (433,215)	$ (5,832,684)	$ (349,791)	$ 8,322,743	
Internal Rate of Return	12.0%				

Leveraged Analysis

	Year 0	Year 1	Year 2	*Stabilization* Year 3
Initial Equity Investment	$ (433,215)	$ (66,785)		
Cash Out (In) – Perm. Financing			$ (1,532,342)	
Net Operating Income				$ 898,700
Permanent Debt Service				$ (562,165)
Debt Coverage Ratio				1.60
Cash Flow after Debt Service				$ 336,535
Return on Equity				**16.0%**
Net Sale Proceeds after Debt				$ 2,012,296
Net Equity Cash Flows	$ (433,215)	$ (66,785)	$ (152,342)	$ 2,348,832
Equity IRR	10.2%			

Note: Short analysis period distorts IRR. IRR will increase with longer holding period because ROE > IRR.

FORT TRUMBULL
Building 2
Supporting Calculations **MAJOR REHAB**

Stabilized Value Estimate

	Amount	Per S/F
Stabilized NOI	$ 898,700	$ 10.45
Cap Rate	11.5%	
Value Estimate	$ 7,814,783	$ 90.87

Permanent Financing

Estimated Value for Financing	$ 7,814,783	
LTV Ratio	70%	
Permanent Loan	$ 5,470,348	$ 63.61
Interest Rate	9.25%	
Amortization	25	
Annual Debt Service	$ 562,165	
Debt Coverage Ratio	1.60	

Excess Cash Flow from Permanent Financing

Permanent Loan	$ 5,470,348
Net Development Costs	$ 7,502,690
Cash Flow from Financing	$ (2,032,342)
Initial Equity	$ 500,000
Cash Out (In) from Financing	$ (1,532,342)

FORT TRUMBALL
Building 2
Occupancy/Absorption Projections **MAJOR REHAB**

Floor	Tenant	Rentable Square Feet	Lease Term	Year 1 – Month 1	2	3	4	5	6	Building Opening 7	8	9	10	11	12	Year 2 – Month 1	2	3	4	5	6	7	8	9	10	11	12
1	1	7,600	7							7,500																	
	2	7,500	6												7,500												
	3	7,750	7															7,750									
2	4	22,750	10										22,750														
3	5	4,500	6													4,500											
	6	4,500	6																		4,500						
	7	4,500	7																								
	8	4,800	7							4,500																	4,500
	9	4,750	6																4,750								
4	10	10,000	10																					10,000			
	11	-	7							-																	
	12	4,000	6							3,750																	
	13	3,750	5																								4,000
Totals		$80,000		-	-	-	-	-	-	18,750	-	-	22,750	-	7,500	4,500	-	-	12,500	-	-	4,500	-	10,000	-	-	8,500
Cumulative				-	-	-	-	-	-	15,750	15,750	16,750	38,500	38,500	46,000	50,500	50,500	50,500	63,000	63,000	63,000	67,500	67,500	77,500	77,500	77,500	80,000
Occupancy Rate				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.3%	18.3%	18.3%	44.0%	44.0%	83.6%	58.7%	58.7%	58.7%	73.3%	73.3%	73.3%	78.5%	78.5%	90.1%	90.1%	90.1%	100.0%

Average Occupancy Year 1	33.3%	6	Months
Average Occupancy Year 2	78.9%	12	Months
Average Occupancy During Lease-Up	62.3%	18	Months

Development Period NOI

[Illegible]	Year 1	Year 2	
Market Price	$20.00	$20.00	Per s/f
Operating Expenses (Stabilized)	$7.25	$7.25	Per s/f
Expense Percentage in Lease-Up	60%	80%	
Operating Expense (Lease-Up)	$4.36	$6.80	Per s/f
Net Market Price	$15.05	$14.20	Per s/f
Net Market Price – Monthly	$1.30	$1.18	Per s/f
Average S/F Occupied	26,378	66,167	
Number Months of Occupancy	6	12	
Development Period NOI	$222,034	$838,587	
Total Development Period NOI		$1,141,801	

Conclusions of Financial and Market Study

Based on the market and feasibility analyses presented, an opportunity exists to renovate the existing Building 2 at Fort Trumbull into Class A office space for the New London market. While new office construction is not feasible at this time, as evidenced by the inability of Shaw's Cove 7 & 8 and Mystic Executive Park to get off the ground, the lower cost basis required to renovate Building 2, coupled with relatively tight market conditions for Class A space, create a feasible environment for redeveloping Building 2 at Fort Trumbull.

Except for the sublease space at Mariner Square, there is currently only one option available for a tenant requiring more than 5,000 square feet of Class A space. Brokers report that a few tenants, Kendall Corp. for example, have had to leave New London because sufficient Class A space was not available recently to accommodate their growth.

At this time, however, market conditions do not justify construction of new commercial space at Fort Trumbull on a speculative basis. Financing will not be available unless there is significant pre-leasing activity, on the order of 65% to 70%, but tenants in the marketplace are generally reluctant to commit to space 18 to 24 months out, as is required for new construction. The Major Rehab scenario for Building 2 illustrates the general feasibility parameters for new multi-story office construction. As office rents for new construction would not be expected to appreciably exceed the economic terms specified under this scenario, the maximum development cost for feasibility would be approximately $100 per rentable square foot, which is below the estimated development cost range of $120 to $150 per square foot for new construction.

Consideration should be given though to the possibility of developing a small "flex" building capable of being built out for office or biotech/bioscience space, and capable of being expanded to accommodate future demand. This flex building should be of good quality construction with an attractive facade, and should have a floor height of at least 18 feet to 20 feet to accommodate the tenant improvement requirements of potential biotech/bioscience users that might demand space as a result of Pfizer's Global Development Facility. Flex space would appear to be marginally feasible in the current market. With hard costs estimated to be approximately $75 to $80 per square foot based on brokers in the market, total development costs could conceivably be kept around $100 per square foot.

Target Market For Commercial Space

For the existing Building 2, which will be redeveloped into Class A office space, the target market will include the following:

- Existing New London companies seeking to relocate, particularly companies in Class B space that desire more modern office space with easily accessible parking
- Existing New London companies seeking to expand that are unable to be accommodated due to the limited amount of available Class A space
- Existing southeastern Connecticut companies seeking relocation or expansion facilities
- Pfizer-related demand from outside the southeastern Connecticut region
- Newly recruited companies from outside the region

For the future commercial development space, the primary target market is expected to be newly recruited companies evidencing Pfizer-related demand, whether it is for general office use or biotech/bioscience use. This demand will most likely come from out-of-region companies that contract with Pfizer and value proximity to Pfizer's Global Development Facility.

Marketing Strategy

The key objectives of the marketing strategy are:

- To successfully position the commercial development space in the market
- To fully lease Building 2 as quickly as possible
- To complete renovation and begin occupancy of Building 2 the opening date of the hotel
- To execute leases for Building 2 on terms that meet or exceed pro forma
- To further develop and refine the target market for the future commercial development space

In order to achieve these objectives, a brokerage firm should be hired to develop, implement, and execute the marketing and leasing campaign. Assuming a 6-month renovation period, and considering the tenant profile anticipated for Building 2, marketing efforts should begin 10 to 12 months prior to the commencement of construction. To minimize tenant leasing and occupancy issues, initial occupancy for Building 2 should be targeted to coincide with substantial completion of the site and

infrastructure work for the whole Fort Trumbull development, which is presently slated for August 2002. Hence, assuming the current schedule is maintained, marketing efforts should commence in April 2001.

In engaging a brokerage firm, approximately two months should be budgeted to solicit proposals from targeted brokerage firms, review the proposals, interview the firms, and select the best firm or firms. Thus, the brokerage firms identified herein (see Marketing Execution Plan) should be contacted in early February 2001 to solicit proposals for brokerage services.

Once a brokerage firm is selected, a more detailed marketing strategy should be developed and the firm should prepare marketing and advertising materials. Preliminary marketing materials, including conceptual schemes, should be prepared for the future commercial development space in the event that sufficient excess demand is generated that cannot be accommodated in Building 2, and/or an end user is identified for a build-to-suit development. This information should also be disseminated to the various state and local resources identified herein (see Marketing Execution Plan).

In addition to hiring a brokerage firm, consideration should be given to establishing a web site for the entire Fort Trumbull development. This would need to be coordinated with the various marketing/brokerage firms for the different development components, and could conceivably be paid for by these firms as part of their assumed marketing and advertising responsibilities. For Building 2, a virtual tour, renderings, images of water views from the upper floors, and other marketing information could be placed on the site, thus providing prospective tenants with

instant access to information to help them evaluate the property.

Once construction has started for Building 2, an on-site marketing center should be established as soon as possible to allow prospective tenants the opportunity to see the space as they might occupy it. The fourth floor would be the ideal location in order to take advantage of the sweeping views of the water.

Targeted leasing milestones for Building 2 would be as follows:

- 50% pre-leased before commencement of renovation
- 75% leased upon completion of renovation
- 100% leased 6 months after completion of renovation

In addition, early in the marketing campaign, a draft office lease agreement should be prepared for future tenants.

Depending upon the level of rehabilitation ultimately selected by Corcoran Jennison Companies, the standard tenant improvement package should generally not exceed the amount specified under the hard cost section of each scenario. Several recent leases have been done with all tenant improvements paid for by the tenant. However, some leases have been done with improvement allowances of up to approximately $17 per square foot. The amount of tenant improvements provided is a negotiating point and will depend upon market conditions at the time of lease negotiation, if tenants require additional improvements over the standard package, then the cost over and above that amount should either be amortized over the lease

term (typically with credit tenants only), or paid for by the tenant up front.

Marketing Execution Plan

Broker Selection

There are four local brokerage firms and one national firm, CB Richard Ellis, which are active in the New London market. There is another national firm, Cushman & Wakefield, with a Hartford office that could potentially service the New London market. In addition, a Boston-based firm, Thompson Doyle Hennessey & Everest has experience with both office and biotech/bioscience space – they are currently marketing BioSquare, which is adjacent to the Boston University Medical Center. These firms should be contacted in January/February 2001 and asked to submit Proposals to provide brokerage services for the commercial space. A sample draft of a Request for Proposals (RFP) for brokerage services has been included in the Addenda. The table below identifies these firms and the appropriate contact information.

FIRM	CONTACT	PHONE #
1. **U.S. Properties, Inc.** Three Shaw's Cove, Suite 202 New London, CT 06320	Susan Howard Jim White	860-437-0101
2. **New England Real Estate Group, Ltd.** 12 Masonic Street New London, CT 06320	Jim Bach Steve Percy Jane Walsh	860-444-7800
3. **Pequot Commercial** 711 Broad Street Ext. Waterford, CT 06385	John Jensen Norm Peck	860-447-9570

4. **Connecticut Commercial Realty** 229 Howard Street New London, CT 06320	Robert Zabarsky	860-444-7704
5. **CB Richard Ellis** 100 Pearl Street Hartford, CT 06103	Dan Barber	860-987-4781
6. **Cushman & Wakefield of Connecticut** 280 Trumbull Street, 25th Floor Hartford, CT 06103-3599	Thomas Collins	617-204-4100
7. **Thompson Doyle Hennessey & Everest** 101 Federal Street Boston, MA 02110	Cathy Thompson	617-330-6900

To be sensitive to community issues, it would be appropriate to include all four local firms in the Broker RFP process. The preliminary recommendation would be to utilize a local brokerage firm to market Building 2, or a joint venture, if possible, between a local firm and a national or regional firm. The typical tenant anticipated to occupy Building 2 would likely be a local company looking to relocate or expand its offices.

The inclusion of ar national or regional firm may be appropriate though as the Pfizer-induced demand anticipated for construction of the proposed 200,000 square feet might include uses other than office – e.g., biotech or bioscience – for which these firms have greater experience. For broker incentive reasons, and because it might be appropriate to begin initial marketing of the proposed commercial space simultaneously with the Building 2, it might be warranted to use one of the non-local firms solely for the marketing of all Fort Trumbull commercial space.

It should be noted that U.S. Properties, Inc. is the agent for most of the space in Shaw's Cove Business Park, and while due consideration should be given to them, they may have potential conflict of interest issues in representing Corcoran Jennison Companies to lease the Fort Trumbull commercial space.

State and Local Resources

There are several state and local resources that should be made aware of and that could provide assistance in the marketing of the Fort Trumbull commercial development space. These resources are as follows:

Resource	Contact	Number
New London Office of Development & Planning	Ned Hammond Economic Development Coordinator	860-447-5203
Connecticut Department of Economic & Community Development	Kevin Crowley Director, Business Recruitment	860-270-8069
SECTOR	John Markowitz	860-701-6054
Connecticut Innovations	Carolyn Kahn Managing Director, Bioscience	860-563-5851 www.ctinnovations.com
Connecticut United for Research Excellence (CURE)	Debra Pasquale President	860-679-1550 www.curenet.org
Connecticut Economic Resource Center (CERC)	Susan Winkler	800-392-2122 www.cerc.com

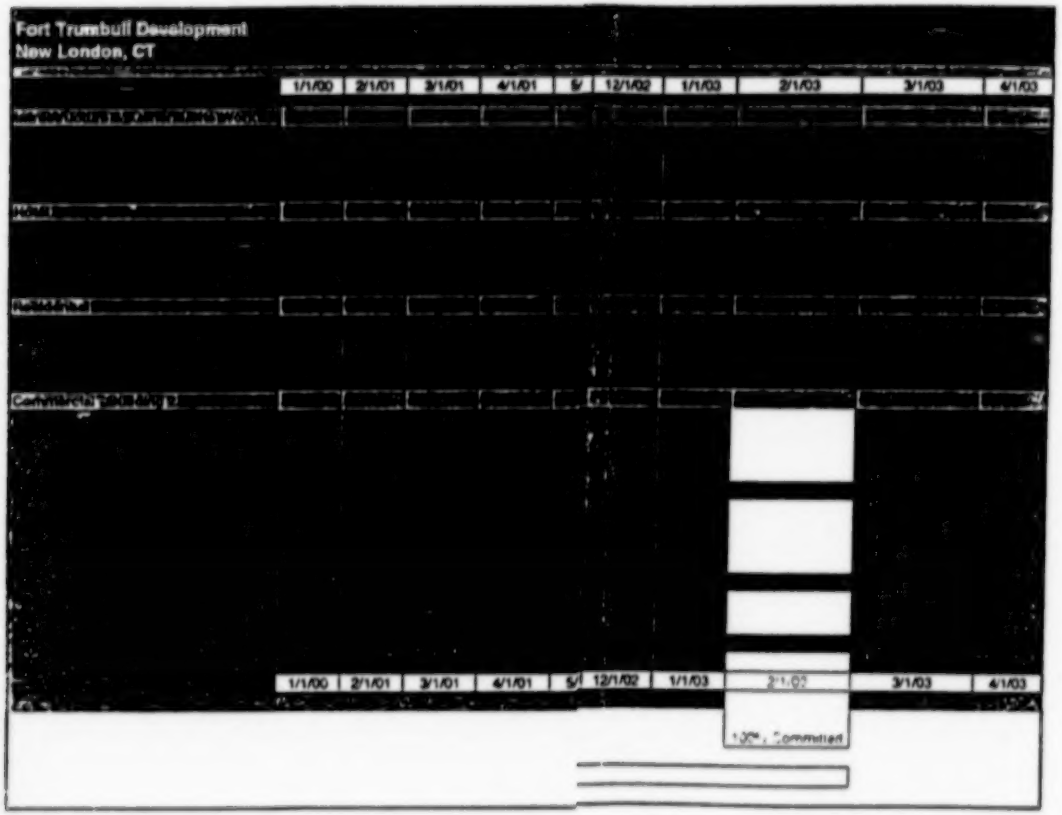
In addition, Pfizer's real estate representative should be made aware of the commercial development program in case the company has a need, or in case a contractor doing business with them might have a need for a local presence.

Project and Marketing Schedule

With respect to the renovation of Building 2. Corcoran Jennison Companies' goal is to complete construction and have initial occupancy at the same time as the infrastructure and site work is completed for hotel and residential space. The current Fort Trumbull development project schedule calls for commencement of site and infrastructure work in August 2001, with completion scheduled for August 2002.

Working back from this date, construction for Building 2 should commence no later than March 2002 to allow for an estimated 6 months of rehab work. The broker marketing and leasing campaign should start no later than April 2001 to allow for sufficient exposure in the marketplace to execute leases for as much of the space as possible prior to completion of construction. Initial requests for proposals from brokerage firms should occur in late January or early February 2001.

On the following page, a Project and Marketing Timeline is presented which illustrates the key dates and milestones for the Fort Trumbull development, as well as Building 2 renovation.



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Marketing Budget

Brokerage fees will comprise the vast majority of the marketing budget for the Fort Trumbull commercial development space. Most marketing and advertising costs are included in the brokerage fee and are the responsibility of the broker. Based on conversations with several brokers in the market, brokerage fees have been estimated at $5.00 per square foot of rentable office space, which is equivalent to $430,000 based on an estimated 86,000 rentable square feet. The brokerage fee will vary depending upon the length of the lease that is executed for each tenant. Typically, brokerage fees are paid 50% at lease execution and 50% at tenant occupancy.

Conceivably, some miscellaneous marketing expenses could be incurred that would not be paid for by the brokerage firm. In addition, although it is not feasible to develop the proposed additional 200,000 square feet of commercial space at this time, it would be beneficial to develop some preliminary marketing materials for circulation simultaneously with Building 2's marketing campaign. Moreover, a brokerage firm might not be willing to pay for marketing materials for the future commercial development space at this juncture.

A budget of $50,000 would seem reasonable to cover miscellaneous expenses associated with Building 2 and the other preliminary marketing materials. This would be exclusive, however, of any cost associated with the development of a Fort Trumbull web site, if that option is pursued.

It is important to note the need for high quality marketing materials and architectural services associated with marketing. Image and identity are key components for a

successful marketing plan. Marketing materials should include, but not be limited to:

- A building photo and/or rendering
- An aerial photo after demolition of all improvements not being retained
- A sample floor plan for each floor
- Sample module layouts

Hopefully, preparation of some marketing materials can be coordinated with the marketing of the hotel and residential portions of the Fort Trumbull development to possibly enable efficiencies and cost savings.

DRAFT

CORCORAN JENNNISON COMPANIES REQUEST FOR PROPOSALS

For

REAL ESTATE BROKERAGE / LEASING SERVICES

FORT TRUMBULL COMMERCIAL SPACE NEW LONDON, CONNECTICUT

FEBRUARY 2001

Introduction

Corcoran Jennison Companies is seeking Proposals from real estate brokerage companies to provide marketing and leasing services for the commercial development space to be included in its Fort Trumbull mixed-use development. Corcoran Jennison Companies intends to select a brokerage firm no later March 31, 2001 and to commence the

marketing of the commercial space as soon as possible thereafter.

Corcoran Jennison Companies is a diversified real estate company with five main operating companies – Development, Property Management, Construction, Hospitality, and Exposition Center Management Services. Since its founding in 1971, Corcoran Jennison Companies has successfully developed in excess of $1.8 Billion of real estate, including apartments, hotels, nursing homes, municipal facilities, exposition centers, schools, health facilities, golf courses, restaurants, resort facilities, marinas, and office centers. The company's corporate offices are located in Boston, Massachusetts.

Background

The New London Development Corporation (NLDC), in association with the Connecticut Department of Economic and Community Development (DECD), has undertaken a municipal planning project targeting an area adjacent to the Thames River in New London, Connecticut. Known as the Fort Trumbull Municipal Development Plan (MDP), the MDP area encompasses approximately 90 acres immediately south of downtown New London and adjacent to historic Fort Trumbull, which will be developed into a state park. The principal catalyst for development in this area is the construction of Pfizer Inc.'s 790,000-square-foot Global Development Facility immediately south of the MDP area.

The NLDC selected Corcoran Jennison Companies as the developer of a 30-acre waterfront parcel adjacent to Fort Trumbull. The majority of the parcel consists of the U.S. Navy's closed Naval Undersea Warfare Center (NUWC).

The balance is made up of a number of residential and commercial properties between NUWC and the Amtrak rail.

Fort Trumbull Project Description

Corcoran Jennison Companies has proposed a mixed-use development, to include a four-star hotel, housing, and commercial space, for the 30-acre parcel. The attached site plan, labeled the Fort Trumbull Development Plan, depicts the latest proposed development plan for the Fort Trumbull site. New roadways and infrastructure will be built to support the development. Total development costs are projected to be approximately $100 million.

The hotel will be situated on the northernmost section of the site. The residential development will be located on the southeastern portion of the site, adjacent to the existing Coast Guard facility and north of Fort Trumbull. The commercial development will be located on the southwestern portion of the site; an existing Italian Dramatic Club located here will be kept and incorporated into the development plan. Plans also include a paved, half-mile riverwalk, which will connect to the Fort Trumbull State Park, and a village green that will be accessible to the public.

Commercial Development Program

At present, approximately 300,000 square feet of commercial space is envisioned for the site. This will be comprised of an existing commercial building containing approximately 91,000 gross square feet, identified as Building 2 by the U.S. Navy, and two proposed buildings of 100,000 square feet each. The MDP called for the inclusion of office

or bioscience-related commercial space. While the new buildings could be developed for either use depending upon market conditions, the existing Building 2 is best utilized for office use given its current construction.

The commercial development program for the Fort Trumbull development will consist of at least two phases, and possibly more depending upon the amount and type of demand that is generated for the 200,000 square feet of proposed commercial space. The first phase of commercial development will involve the renovation and redevelopment of the existing Navy Building 2 into a Class A office building for the New London market. Building 2 is a four-story, steel frame, brick and glass structure completed in 1991 as sonar research and development space for the Navy. It is in reasonably good condition and can be easily renovated to Class A office space for the New London market.

Because the building was constructed for single-tenant occupancy, it will require renovation to accommodate multi-tenant occupancy as appropriate for the New London office market. A first-floor lobby will need to be added, as well as common area on each floor depending upon the space requirements of future tenants. Also, the entrance to the building is currently on the east side and most likely will need to be relocated to orient it to the street grid planned for the Fort Trumbull development.

Building systems are being evaluated to determine their appropriateness for reuse. It is known that a heating system will need to be added because Building 2 was previously heated by a system supporting several other Navy buildings. In addition, analysis will need to be completed to determine whether the existing elevator and

rest rooms are adequate for multi-tenant office use in the current market, or whether additions are required. Parking will be provided around the building, with excess parking for the near future provided on the adjacent land that will support the future commercial development.

Future phases will involve new construction of either Class A office space or biotech/bioscience space, as demand warrants. The present plan for the proposed commercial space includes the development of two 100,000 square foot buildings along Walbach Street, south of the existing Building 2. The new buildings will be developed as market conditions warrant.

Submittals

Interested parties should submit a Proposal to provide marketing/leasing services for the commercial development space at Fort Trumbull. Respondents should outline their general approach to providing marketing/leasing services and should demonstrate capacity and expertise to develop and implement a marketing program that will minimize lease-up periods, maximize rents, and enhance project values.

In the Proposal, respondents are encouraged to propose and/or provide recommendations relative to the proposed commercial space at Fort Trumbull, both the existing Building 2 and the planned 200,000 square feet, with respect to:

- Marketing Strategy
- Project Identity
- Marketing Timeline
- Type and Frequency of Advertising/Marketing
- Target Market for Tenants

- State and Local Resources for Attracting Tenants
- Pricing – Rent, Lease Term, Tenant Improvements
- Credit Quality of Tenants
- Specifications for Tenant Improvements
- Projected Absorption/Occupancy Milestones

In addition, respondents should provide:

- A company overview/business history (description of business organization, date founded, number of years providing services requested, etc.)
- Resumes of key personnel who will be actively involved in the project, including identification of relevant professional licenses
- References and contact information (at least two for each key personnel)
- Sample marketing materials, including brochures, advertisements, etc.
- A sample lease proposal for a prospective tenant
- Examples of comparable firm experience as owner's agent for commercial space

Respondents are also encouraged to provide information on current market conditions for commercial space in the New London market area, including an overview of supply and demand trends, comparable lease and sale information, competitive projects planned and/or under construction, etc.

Fee Structure

Respondents should include in their submittals a proposed fee structure for the services to be provided. Respondents should be specific as to what marketing materials and

advertising expenses are included as part of the services provided.

Insurance

Respondents should include in their Proposal a brief description of the firm's general liability insurance coverage, including limits and deductibles.

Selection Schedule

Request for Proposals available	February 1, 2001
Pre-submission Meetings & Tours (To be scheduled individually)	Between February 5 – 16, 2001
Proposals Due	February 28, 2001 (5:00 p.m.)
Corcoran Jennison Companies Review/Inquiry	Between March 1 – 15, 2001
Selection of Brokerage Company	No later than March 31, 2001
Commencement of Marketing/ Leasing Campaign	April 1, 2001

Evaluation Criteria

Corcoran Jennison Companies shall consider the following criteria in evaluating Proposals (not listed in any specific order of importance):

- Responsiveness to Request for Proposals
- Company/Broker Experience
- Approach to Marketing Project
- Pricing and Fee Structure

Time and Place of Submission

Respondents must submit five (5) copies of their Proposal to Corcoran Jennison Companies. Proposals must be received by 5:00 p.m. on Wednesday, February 28, 2001. Proposals should be addressed to:

Marty Jones
President
Corcoran Jennison Companies
Bayside Office Center
150 Mount Vernon Street
Boston, MA 02125

Corcoran Jennison Companies reserves the right to modify or withdraw this Request for Proposals at any time and to reject any and all Proposals.

DEFENDANTS' EXHIBIT 38

FORT TRUMBULL
MUNICIPAL DEVELOPMENT PLAN
New London, Connecticut

August 1999

Revised Administrative Draft

Prepared on behalf of:
The City of New London
by:
New London Development Corporation
New London, Connecticut

Sponsoring Agency:
State of Connecticut
Department of Economic and Community Development

Implementing Agency:
New London Development Corporation
New London, Connecticut

Administrative Contributors:
The Downes Group – Program Management
Milone & MacBroom, Inc. – Plan Coordination

Technical Contributors:
Diversified Technology Consultants, Inc. – Civil Engineering
Harrall-Michalowski Associates, Inc. – Neighborhood Relocation and Land Use Planning
HRP Associates, Inc. – Hazardous Waste and Contamination Assessment
Milone & MacBroom, Inc. – Environmental Impact Evaluation
RKG Associates, Inc. – Economic Analysis
Wallace Roberts and Todd – Land Use Planning

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1.0 INTRODUCTION

1.1 MDP Process

The New London Development Corporation (NLDC), in association with the Connecticut Department of Economic and Community Development (DECD), is undertaking a municipal development planning project adjacent to the Thames River in New London, Connecticut. NLDC is a nonprofit, private economic development organization originally formed in 1978. The corporation was established with the authority to raise and borrow funds, manage projects, acquire and sell properties, and engage in any activity related to the progress and general welfare of the community.

This Municipal Development Plan (MDP) has been prepared under Chapters 130, 132, and/or 588(1) of the Connecticut General Statutes. The New London City Council gave authority to NLDC to prepare the MDP for the Fort Trumbull area in a resolution passed in May of 1998. The resolution also established the boundaries of the planning area.

Prior to initiating the municipal development planning process, an Environmental Assessment (EA) and

an Environmental Impact Evaluation (EIE) were completed in accordance with the Connecticut Environmental Policy Act (CEPA), established in Sections 22a-1 through 22a-lh of the Connecticut General Statutes and Sections 22a-1 through 22a-1a-12 of the Regulations of Connecticut State Agencies.

In June of 1998, the Connecticut Department of Economic and Community Development issued an Environmental Assessment for the Fort Trumbull MDP area which concluded that the project could potentially have a significant effect on the environment. Several major areas of concern were identified in the EA, including the possible acquisition of residential properties and relocation of residents; adequacy of the existing water supply; congestion and traffic safety issues; historic importance and archaeological significance of the project area; flooding; and stormwater management. As a result of DECD's finding, an Environmental Impact Evaluation was undertaken.

The EIE process began in late June 1998. Numerous consultations were engaged to assist in specific phases of the work. Preliminary findings were discussed at numerous neighborhood meetings. Input and review comments were solicited from the community and interested public on the Draft EIE. Input was also solicited from local, state and federal agencies.

Following completion of a 45 day public comment period of the Draft EIE, the Connecticut Department of Economic and Community Development forwarded to the Office of Policy and Management the Final EIE and Record of Decision (dated March 1999), consisting of all public notice documentation, comments received from all interested parties, the agency decision relative to proceeding with the proposed action, and a discussion of the intentions for initiation of actions for

minimizing impacts, for determination of the adequacy of the evaluation.

The CEPA process concluded with the review of the Final EIE and Record of Decision by OPM and their April 20, 1999 determination that regulatory requirements were satisfied, with several conditions. Appendix A contains a copy of selected relevant correspondence and documentation from the Record of Decision and the April 20, 1999 OPM approval letter.

The Final EIE and Record of Decision is the basis for the implementation of the project. The subject Municipal Development Plan has been developed to be consistent with the findings of the CEPA process.

A mandatory public hearing will be held prior to local adoption of the MDP by the City of New London. Procedures for the adoption of the MDP are set forth in Section 32-224(c) of the Connecticut General Statutes. This process must include a finding by the OPM that the plan is not inimical to the overall goals and objectives of the state. Upon obtaining such a finding, the plan would then be legally adopted by the city and approved by DECD.

1.2 Project Background

The City of New London is a waterfront community along the tidal estuary of the Thames River and Long Island Sound in southeastern Connecticut. Figure 1 is a location map of the City of New London. New London is only 5.79 square miles in size, making it geographically the second smallest municipality in the State of Connecticut. Nearly 54% of the total land area of New London is exempt from local property taxes.

The Fort Trumbull MDP area is approximately 90 acres in size and includes residential and commercial areas comprised of approximately 115 parcels. The

project area includes the 32-acre U.S. Navy's closed Naval Undersea Warfare Center (NUWC), the regional Water Pollution Control Facility (WPCF), and the adjacent Fort Trumbull area as shown in Figure 2.

The driving force behind this project is the City of New London's desire to revitalize its economy by focusing on the potential offered in the Thames River corridor. A key catalyst for development of this area is the proposed Pfizer, Inc. Global Development Facility to be located immediately to the south of the MDP boundary. In an effort to induce private investment into the Fort Trumbull area, considerable funding has been committed to this redevelopment project by various offices of the State of Connecticut and the City of New London.

In order to guide the redevelopment of the Fort Trumbull area, the New London Development Corporation, after numerous public meetings and consultation with Federal, State, regional and local organizations, identified four major goals for the redevelopment of the site. These goals are presented below:

- To create a world-class development that will complement the undertakings of Pfizer, Inc. and set a standard for development in New London;
- To create an economic asset for the City of New London that will create jobs, generate tax revenue, and result in spin-off economic activity;
- To maximize public access to the waterfront and, in doing so, encourage uses which are water dependent or which will be enhanced by water access and views; and
- To develop a project which will help build momentum for the revitalization of downtown New London and the balance of the city to the benefit of the City's residents and visitors

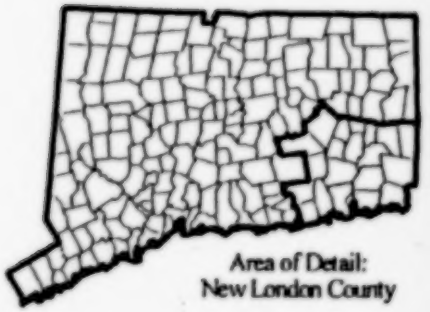
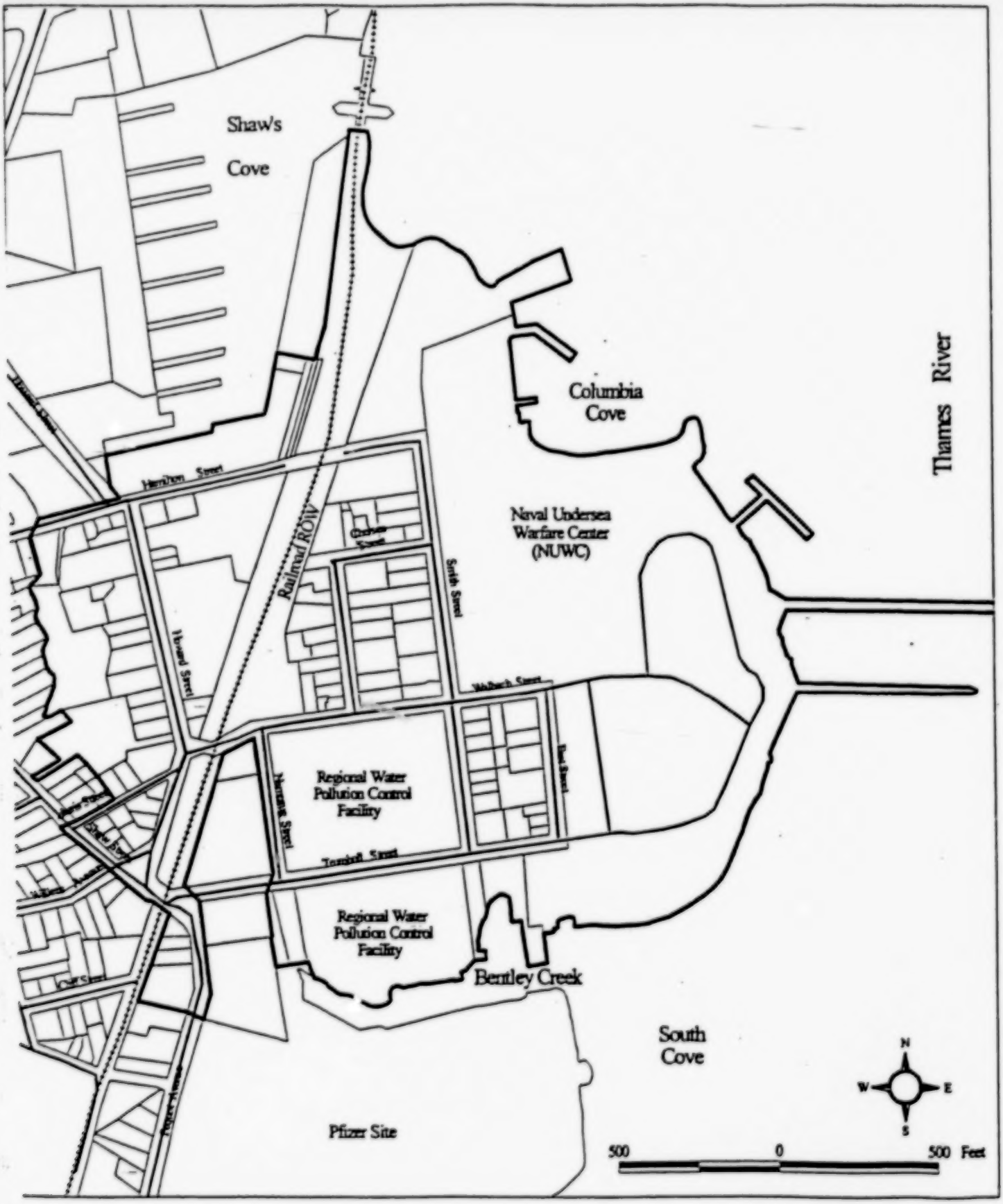


Figure 1
Location Map - City of New London

Fort Trumbull MDP Area - New London, Connecticut
Draft Environmental Impact Evaluation - November 1998



Fort Trumbull MDP Area - New London, Connecticut

Figure 2

Note: GIS coverages developed by Milone & MacBroom, Inc. and HMA, Inc. Sources include Connecticut DEP, City of New London, FEMA, and US Navy. Intended for planning

The Environmental Impact Evaluation evaluated six land use alternatives with an array of land uses. While there is some overlap and common elements in the six land use alternatives, each has a distinct theme as noted below:

Alternative No. 1 – No Action

Alternative No. 2 – Recreation/Tourism

Alternative No. 3 – Residential/Commercial

Alternative No. 4 – Business Campus

Alternative No. 5 – Mixed Use 1

Alternative No. 6 – Mixed Use 2

The analysis contained in the Draft EIE evaluated the impact of the various components associated with the six land use plans. It was recognized that the ultimate preferred land use plan could borrow land use components from any or all of the plans. As stated in the Draft EIE: "The alternative plans represent general land use areas and density of development. They are not intended to be exact geographic limits or configurations. A preferred alternative has not been selected and it is anticipated that the ultimate selected preferred plan may be a hybrid of several alternatives."

Following the 45 day review and comment period of the Draft Environmental Impact Evaluation for the Fort Trumbull MDP area, review of public and state agency comments, and consideration of the administrative record, technical data and other relevant information, the Record of Decision was developed and a preferred composite land use plan was selected as presented in Figure 3. The four goals identified for this project which highlight economic development through the creation of jobs, tax revenues, and spin-off

economic activity, played a major role in the ultimate selection of the preferred composite land use plan. A conditional approval was subsequently issued on April 20, 1999 by the Office of Policy and Management (See Appendix A).

Balancing the competing needs and impacts of this project led to the ultimate selection of a modified mixed use alternative. A compromise of economic development with environmental impacts resulted in an alternative which takes advantage of the economic potential of business development, coupled with the positive aspects of a mixed use community development. The result is a positive outcome with fewer negative impacts.

* * *

1.3 Summary of Major EIE Issues

The following discussion briefly summarizes the major issues raised during the Draft EIE review process.

Regional Water Pollution Control Facility and the Active Amtrak Rail Line – The western Fort Area supports a sewage treatment plant and the active Amtrak railroad. The adjacency of these land uses to the planned land uses in the MDP area posed a challenge with respect to compatibility and aesthetic issues. Placement of less sensitive land uses in combination with planned improvements to the WPCF have been incorporated into the MDP to lessen the impacts of these utilities.

Proposed Fort Trumbull State Park – A 16-acre State Park will be located at the inactive NUWC site along the Thames River. The MDP has been prepared in an effort to complement and be compatible with the proposed park.

Traffic – The MDP and other planned projects in the vicinity of the Fort Trumbull area will result in additional traffic. Mitigation measures have been proposed to offset these impacts.

Cultural Resources – Several studies have revealed that areas of low, medium, and high archaeological sensitivity exist within the MDP area, both within and outside of the NUWC site. An overview of the recommendations of the Connecticut Historical Commission and related studies can be found in the Final Environmental Impact Evaluation and associated Record of Decision dated March 1999 (EIE/ROD), in section 2.7.3, entitled "Cultural Resources in the MDP Area."

All necessary mitigation will be reviewed by the Connecticut Historical Commission and State Historic Preservation Office, and performed to their standards in areas that will be disturbed due to the implementation of the MDP.

Studies to date include "Cultural Resources Survey: Naval Undersea Warfare Center," prepared by TAMS Consultants, Inc. for the Northern Division Naval Facilities Engineering Command Department of the Navy, April, 1998 and "Archaeological Assessment Survey: The Fort Trumbull MDP Area," prepared by Keegans Associates, LLC, September, 1998 for NLDC. The results of these surveys have been reviewed, and the proposed course of action incorporates their recommendations. Both of these surveys are cited in the composite land use plan recommended in February 1999 "Selection of and Rationale for the Preferred Alternative – Fort Trumbull MDP Area," which noted areas of low, medium, and high archaeological and cultural sensitivity. Certain areas within the MDP will require mitigation work to be completed before these areas are disturbed. This work has already been

initiated with the concurrence of the Connecticut Historical Commission and State Historic Preservation Office.

Floodplain Issues – As shown in Figure 5, much of the Fort Trumbull MDP area is located in the flood hazard zone. An exemption from current DEP floodplain policy is required in order to pursue the proposed development within a portion of the MDP area that is currently classified as floodplain. The MDP plan involves the addition of fill to elevate portions of development areas in Parcels 1 and 2 that are currently classified as floodplain, and raise the land in those areas above the 100-year flood plain.

A Floodplain Management Certification exemption is being requested through the Department of Environmental Protection concurrent with the MDP approval process. A copy of the exemption package is included under separate cover to the MDP (see Appendix G for the Executive Summary). The exemption is merited due to the following unique existing conditions at the site:

- Existing flood plain elevations in the hotel and residential development sites are high, within one to three feet of the predicted 100-year flood elevation. A relatively small amount of fill is required to remove these hotel and residential development sites from the flood plain. The hotel site will require approximately 1,700 cubic yards of fill, and the residential site will require approximately 7,700 cubic yards of fill. The cost of fill to raise site to the 100-year base flood elevation of 10.0 feet NGVD will be borne by the private developer. Figure 6 shows the future proposed floodplain.
- Floodplain area is attached to large area of higher ground. Therefore the proposed grade changes will not create "islands" during flooding events.

- The floodplain area in its current state is completely covered with asphalt and buildings which must be demolished. It is likely that site and soil remediation alone will increase elevations on portions of the property, placing them above the 100-year floodplain.
- The completed project will reduce the impervious coverage of the site to approximately one-half of the current coverage.
- The NUWC site, which comprises a large portion of the waterfront land in the MDP area, is a former military base. The existing buildings are not flood proofed and it is economically infeasible to upgrade them to FEMA standards for re-use.
- The project goal is to promote economically viable development that restores this land to the tax base of the City of New London.
- The proposed project has no impact on flood storage or velocity issues because this area of the Thames River is tidally influenced and not subject to riverine flooding.
- A flood evacuation route will be provided on streets that are at elevation 7.1 feet NGVD or higher, as shown in Figure 4. This meets the FEMA flood level standard for a 10-year storm, and is 0.7 feet higher than the U.S. Army Corps of Engineers 10-year flood level of 6.4 feet NGVD.
- During the 100-year design storm, the evacuation route will be impassable to vehicles for only one hour and 35 minutes, and will be impassable to emergency vehicles for only 50 minutes out of the 12 hour cycle.
- Proposed hotel and residential development will comply with the provisions of the National Flood Insurance Program. Finished grades in those

development sites will be at or above 10.0 feet NGVD. The lowest floor of residential structures (including the hotel) will be built at or above 13.4 feet; one foot higher than the 500-year flood level of 12.4 feet NGVD (see Figure 4).

Revisions to FEMA flood maps will be completed prior to the occupancy of any structures within the parcel areas.

Emergency Evacuation – An evacuation plan outline has been created, and is included in Section 5.5. Also refer to Figure 4.

Connecticut Coastal Management Act – The proposed development of the Fort Trumbull peninsula is intended and committed to providing maximum water access and water dependent uses. The project plan includes a network of public access walkways along the entire waterfront. For boating and water access, the plan includes an improved and enhanced Fort Trumbull marina on Bentley Creek, which will be incorporated into a future marina training center, as well as a site for a future marina (including piers for larger vessels) along the Columbia Cove waterfront. Additionally, Parcel 6 includes a waterfront development site on Shaw's Cove, shorefront that is currently occupied by a non-water dependent use.

An additional marina site, which will be set aside for mixed use (including commercial fishing vessels), is intended for the waterfront portion of Parcel 1 between the Columbia Cove Marina and the Shaws Cove Railroad bridge.

Commercial fishing and lobstering vessels are currently homeported in the MDP area. Some of these vessels will be accommodated at Fort Trumbull Marina. Should any other of the fishing related businesses currently operating in the MDP area need to relocate outside of the MDP area, the Relocation Plan (included herein as Appendix E) anticipates providing

financial and other relocation assistance in accordance with Chapter 135 of the Connecticut General Statutes. This information is highlighted in section 7.4, entitled "Availability of Relocation Facilities."

The MDP is committed to no overall diminishment of water dependent uses. This includes no displacement of water dependent uses without relocation support as indicated above, involving either integration with the development program or finding of an alternative suitable site.

Conclusions

The areawide Phase I environmental site assessment has been completed for the MDP area. Based on conditions encountered, it is believed that environmental contamination of soils and groundwater exists within the project area. The likely contaminant/waste types expected to be encountered during the investigation and remediation of the properties within the MDP area generally include:

- Petroleum products (gasoline, heating oil, waste oils, lubricating oils) associated with a gasoline station, several auto and marine repair facilities, several current and former underground oil tanks and a former oil terminal.
- Commercial/industrial solvents (degreasing, dry cleaning, autobody and painting) associated with auto and marine repair facilities, former dry cleaning operations, wood furniture refinishers and autobody/painting operations.
- Metal-containing wastes associated with former foundry operations and a junkyard
- Polychlorinated Biphenyls (PCBs) associated with a former junkyard, a railroad maintenance facility and a former barrel storage facility.

Further investigations will be required to confirm and define suspected contamination sources, possibly including:

- soil gas analysis to screen for areas of contamination in soils and groundwater;
- a ground penetrating radar survey (GPR) on certain sites where unidentified USTs are suspected;
- collection of surface soil or waste samples to determine if surficial soils are contaminated from operations spillage or disposal;
- installation of borings and sampling of subsurface soils to determine if USTs have leaked and to determine sources and extent of groundwater contamination;
- sampling of waste and debris piles, abandoned and unidentified drums and containers;
- asbestos surveys;
- survey buildings for lead paint using x-ray fluorescence; and
- sampling of stained or potentially contaminated building surfaces.

Phase II Environmental Site Assessments will be performed at the 15 locations in the project area indicated in Table 3-5. These 15 specific areas include multiple land parcels where the current or former use of the property spans two or more defined municipal tax lot designations. Also, although included in the MDP area Phase I review, the following properties are currently being addressed under different state or federal programs in terms of environmental investigation and remediation: The former Naval Undersea Warfare Center (NUWC) and the two parcels adjacent to the south half of the Calamari Brothers Scrap Yard. Additionally, the two parcels within the MDP which are occupied by the Regional Water Pollution

Control Facility (sewage treatment plant) are to be unaffected by the MDP redevelopment and therefore no additional work is anticipated.

Table 3-5
Recommended Phase II ESA

Site (Properties)	Address	Development Parcel
Miner & Alexander Lumber (67)	150 Howard Street	6
Former Spinatos Body Shop (80, 81)	65 Hamilton Street	5B
Former Pequot Foundry (64)	162 Howard Street	5B
Ron's Autobody (31)	72 Smith Street	2
Former Pequot Foundry (78)	190 Howard Street	5A
Former Junkyard (91-94)	197 Howard Street	5C
Former Carole Cleaners (65)	216 Howard Street	5A
Former Barrel Storage (100, 101)	163 Howard Street	5C
Former Bottling Works (108)	23 Hamilton Street	5C
Leo's Gasoline Station (97, 98)	175 Howard Street	5C
Castle Oil Terminal (36)	Smith and Hamilton Streets	1
Trumbull Building (10)	82 Trumbull Street	4A
Trumbull Marina (7, 8 60)	93 Trumbull Street	4B
Former Broach Manufacturer (114)	21 Pequot Avenue	7
Amtrak Yard (109)	30 Walbach Street	3
(properties) = lot numbers from EIE/ROR Fig. 2.15-1 and Table in Appendix E.		

The remaining properties in the MDP area are considered low risk residential, commercial or undeveloped properties.

Based on the results of the pending Phase II investigations, it is anticipated that most of the properties will require one or more of the following:

- Degree and extent of contamination definition (Phase III);
- Preparation of remedial action plans (RAP) based on the type, distribution and severity of contamination and the intended reuse of the property; and
- Remediation of the property pursuant to the RAP.

Some of the properties within the MDP area may be regulated under the Connecticut Transfer Act (CTA) C.G.S. 22a-134a through 134e and therefore subject to CTA guidelines as well as applicable state and federal regulations for remediation. Specifically, those properties identified as definite or potential CTA regulated sites are indicated in Table 3-6.

Table 3-6
Potential CTA Regulated Sites

Site	Address	Reasoning
Former Junkyard	197 Howard Street	Former junkyard through 1985, possible
Amtrak Yard	30 Walbach Street	Operational Rail Maintenance Facility, possible
Former Broach Manufacturer	21 Pequot Avenue	Wood Stripper Ca. 1985 to present, definite
Ron's Autobody	72 Smith Street	Active Autobody Shop, definite

For those properties which are determined to be establishments in terms of the CTA, the following additional actions will be necessary upon property transfer:

- Filing of a Form I, II, III or IV with CT-DEP (Form I is for establishments where no release has occurred; Form II where all releases have been remediated and the DEP Commissioner or a Licensed Environmental Professional (LEP) has verified completion; Form III where a release has occurred but investigation/remediation is still being performed, and Form IV where all remedial actions have been performed but post-remedial monitoring has yet to be completed.
- Filing an Environmental Condition Assessment Form (ECAF) concurrent with any Form III or Form IV filing. The ECAF will be reviewed by DEP who will either retain the lead for investigation and remediation or allow assignment to a Licensed Environmental Professional (LEP) to bring the property into and verify compliance with the Remediation Standard Regulation (RSR) RCSA 22a-133k-1 through 133k-3.

Although several of the other high risk sites have some potential for site contamination, they do not meet the CTA regulatory thresholds for hazardous waste generation or specific activity, during the requisite time frames.

Based on the age of most of the buildings in the MDP area, they can be expected to possibly contain both asbestos materials and lead based paint products, as confirmed by initial walkthroughs of accessed properties.

Prior to the demolition of any commercial, industrial or public buildings or buildings containing five or

more residential units, they must be inspected for asbestos-containing material and any such materials must be removed. The National Emissions Standards for Hazardous Air Pollutants – Subpart M also requires that the Federal EPA be notified 10 working days prior to demolition. For further information, contact the EPA at (617) 918-1650.

The disposal of material containing asbestos requires the approval of the Waste Engineering and Enforcement Division pursuant to section 22a-209-8(I) of the Regulations of Connecticut State Agencies. Proper disposal technique requires that the material be bagged and labeled and placed in an approved secure landfill. For further information and to obtain the application for approval, contact the division at (860) 424-3366.

The disposal of demolition waste should be handled in accordance with applicable solid waste statutes and regulations. Clean fill is defined in section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA) and includes only natural soil, rock, brick, ceramics, concrete and asphalt paving fragments. Clean fill can be used on site or at appropriate off-site locations. Clean fill does not include uncured asphalt, demolition waste containing other than brick or rubble, contaminated demolition wastes (e.g. contaminated with oil or lead paint), tree stumps, or any kind of contaminated soils. Land clearing debris and waste other than clean fill resulting from demolition activities is considered bulky waste, also defined in section 22a-209-1 of the RCSA. Bulky waste is classified as special waste and must be disposed of at a permitted landfill or other solid waste processing facility pursuant to section 22a-208c of the Connecticut General Statutes and section 22a-209-2 of the RCSA. For further information concerning disposal of demolition

debris, contact the solid waste staff of the Waste Engineering & Enforcement Division at (860) 424-3366.

Residue generated by the removal of lead paint is considered to be hazardous waste if it meets the characteristics contained at 40 CFR 261. This must be determined on a case-by-case basis for each abatement project prior to disposal. The disposal of hazardous waste is regulated pursuant to sections 22a-449(c – 11 and 22a-449(c – 100 through 22a-449(c – 110 of the RCSA. Proper disposal procedure is for a permitted hazardous waste hauler to transport the waste to an approved disposal facility. The Bureau of Waste Management has prepared a document, "Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation and Demolition Industries."" For further information and to obtain the guidance document, contact the Waste Engineering and Enforcement Division at (860) 424-3372.

The removal of underground storage tanks should follow the procedures outlined in the code of the National Fire Protection Association (NFPA 30, Appendix B). Individual soil samples should be obtained from the underlying native soil. A listing of potential contaminants that should be analyzed and suggested analytical methods is included in a DEP fact sheet entitled "Sampling and Analytical Methods for UST Closure." If contaminated soil, ground water, or free product is observed at the site or detected by sample analysis, the DEP must be immediately notified at (860) 424-3338 and corrective action must be undertaken in accordance with section 22a-449(d)-106 of the RCSA. Closure reports, including confirmation of sampling and clean-up, are required by Federal and State law. For further information, contact the Bureau of Waste Management, Underground Storage Tank Program at (860) 424-3374.

If soil and/or groundwater contamination is discovered during the implementation of the project, the Permitting, Enforcement and Remediation Division should be notified in writing. The site will then be placed on the division's database and further assessment will be made to determine the appropriate course of action. In order to achieve proper remediation, the extent of contamination should be clearly defined, a cleanup plan developed, and measures implemented that will clean up the site in accordance with applicable criteria in the Connecticut Remediation Standard Regulations adopted pursuant to section 22a-133k et seq. of the CGS. For further information, contact the Permitting, Enforcement and Remediation Division at (860) 424-3705.

3.5.2 Environmental Impact Evaluation

The Final *Fort Trumbull MDP Area Environmental Impact Evaluation (EIE)* and associated Record of Decision provided under separate cover, is incorporated herein by reference.

* * *

5.0 PROPOSED IMPROVEMENTS

5.1 Proposed Land Uses

The proposed land uses for parcels within the MDP area are graphically illustrated in appended Map 5.1. The following discussion summarizes opportunities for use of the parcels within the area. The proposed composite land use alternative has been estimated to generate between $680,000 and $1,250,000 in additional property taxes annually.

Parcel 1 – Village/Hotel Parcel (10.5 acres)

This parcel will accommodate a combination of uses to create a small urban village. The largest and most prominent feature will be a high-quality conference hotel with between 200 and 250 rooms, meeting space, banquet facilities, restaurants, and boutique retail. This complex will face the Thames River and front on the village green.

Convenient parking with approximately 375 spaces will be provided in an adjacent lot and garages, including a parking deck below the hotel structure (at or above 10.0 feet NGVD).

On the waterfront, across the Riverwalk from the hotel, will be a marina that will cater to transient boaters who want shore access to the sites and activities of the Fort Trumbull area and, particularly, the village center. In season, the marina will offer a variety of facilities to area residents, hotel occupants, and the general public, such as boat rentals, boating lessons, and fishing, thereby adding interest, entertainment, and water-edge activities in front of the hotel and near the Village Green.

An additional mixed use marina site will be available on the waterfront north of the hotel. This marina site is intended to provide additional mooring facilities for commercial fishing vessels. There will be a continuous public walkway along the water's edge of the entire parcel.

Parcel 2 – Residential Parcel (10.3 acres)

The residential parcel will provide for a community of approximately 80 new residential units. The parcel is located north of Walbach Street between Smith Street and the proposed Fort Trumbull State Park.

The proposed residences will offer a variety of locations and orientations, including riverfront, river view, park view, and adjacency to the village center. The buildings will be organized to create an urban neighborhood with units that will be immediately adjacent to or near amenities including the river, village shopping and services, and the state park.

The community will be located adjacent to mostly passive uses within the peninsula. Vehicular access will be provided from Smith Street and a network of internal residential streets. The community will adjoin the village to the north, where residents will have easy access to services and conveniences. There will be community and recreational facilities within the development to serve residents. Among them will be a pool complex, sport courts, and a community meeting/club room. Each unit will have parking for residents and guests. A continuous public access walkway will pass through the community along the river's edge linking it to the State Park, the village center, and points beyond.

A site at the southern end of Parcel 2 adjacent to the State Park has been reserved for the development of the National Coast Guard Museum, which will move to this site from the Coast Guard Academy.

Parcel 3 – Office/R&D/Health Club (7.0 acres)

Located between the proposed residential community on Parcel 2 and the railroad right-of-way, this parcel will be used for high-technology office space. It will also include a two story health club complex with pool. This complex will be available to hotel guests, residence owners, and members of the business and residential communities of the city.

The parcel will support a minimum of 90,000 square feet of office space, plus necessary parking. The option exists to build either two or three story buildings. Some parking could be included on parking decks below the structures to reduce the amount of ground space devoted to impervious cover. The remaining surface parking can be located within the interior of the parcel behind the buildings and largely buffered from view.

The location of this development parcel will be close to the improved intersection of Walbach and Nameaug Streets, allowing traffic to have direct access to the development rather than crossing through other uses proposed for the redevelopment area. Landscape enhancements at the intersection and along the length of a new Nameaug Street will help create a distinctive and attractive access corridor to the village center. This location for R&D/office space will provide workers convenient access to support services in the village center. It is also in close proximity to other office and R&D development in the vicinity, including the Pfizer Global Development Facility.

Parcel 4 – Park Support/Marina Parcels (2.4/1.7 acres)

Parcels 4A and 4B will provide land and water renovation of the small marina and development of a unique state-of-the art marina training center. Existing buildings will be used for support and training facilities. The existing marina will be reconfigured and rebuilt to provide between 40 and 50 permanent slips. The riverwalk will be continued from the state park through these development parcels and beyond to the head of Bentley Creek. Pedestrian access through the wastewater treatment facility will be negotiated with

the City to provide a continuous walkway system. A portion of Parcel 4A will be redeveloped for uses that support the state park, such as parking, or for uses such as retail that will serve park visitors and members of the community.

Parcel 5 – Office/R&D Parcel (2.4/1.9/5.3 acres)

Parcels 5A, 5B, and 5C will provide space for modern, technology-oriented office/R&D buildings, as well as associated surface parking. The three parcels will accommodate four buildings for a total of approximately 140,000 square feet of building space. The existing building on Parcel 5A, which was recently renovated for office use, will be retained. Some of the parking previously approved for this building in a location west of Howard Street will be retained as well. Parcel 5B will be redeveloped for a two-story building with surface parking. Parcel 5C will be developed for two, two-story buildings and some convenience retail use near the intersection of Howard and Shaw Streets.

Howard Street, which separates Parcel 5C from Parcels 5A and 5B, will be slightly realigned and improved with new sidewalks, curb-cuts, street lighting, landscaping, and signage to provide convenient and safe vehicular access to the development parcels. Improvements to Howard Street and the railroad underpasses will establish a new image and gateway to the entire redevelopment area and will reinforce the City's prior redevelopment efforts along Howard Street south of Bank Street.

Parcel 6 – Waterfront Commercial Parcel (2.3 acres)

Parcel 6 will be used for a mix of water-dependent commercial uses. Access for vehicles will be from

upgraded Howard Street and Hamilton Street and for boats from Shaw's Cove. The parcel will accommodate three buildings for a total of between 20,000 and 25,000 square feet, in addition to the required parking.

Parcel 7 – R&D/Office Parcel (0.72 acre)

This parcel is located southwest of the intersection of Pequot Avenue and Trumbull Street. This area will be reconfigured for better vehicular and pedestrian circulation and improved access under the rail line. The parcel is small and will be used for office/R&D development.

5.2 Proposed Zoning

5.2.1 Proposed Zoning Designation Changes

Appended Map 5.2 presents the proposed zoning classifications for parcels within the MDP area. All of the MDP area east of the Amtrak Railroad right-of-way to the water's edge will be zoned WC-I with special provisions. Please refer to Map 3.2 and Section 3.2 which presents a summary of existing zoning designations.

The following revisions to the zoning classifications for the MDP parcels will be recommended to the City of New London Planning and Zoning Commission:

- Parcel 1 currently has three zoning classifications comprised of a narrow strip of WD zoned land running parallel to the railroad right-of-way, a small portion of C-1 zoned land along the old Hamilton Street right-of-way, and a sizeable waterfront parcel zoned WC-I. Future zoning of Parcel 1 shall be WC-I.

- Parcel 2 shall retain its current zoning classification of WC-I.
- Parcel 3 is currently zoned C-1. This shall change to a WC-I zoning classification.
- Parcel 4A is currently zoned C-1 land. This shall change to a WC-I zoning classification. Parcel 4B shall retain its current zoning classification of WC-I.
- Parcels 5A, 5B and 5C shall retain their current zoning classification of C-1.
- Parcel 6 shall retain its WD classification.
- Parcel 7 shall retain its WC-I classification.
- The area of the regional Water Pollution Control Facility is currently zoned C-1 north of Trumbull Street and WC-I. It should be noted that zoning regulations do not necessarily apply to municipal property owned or leased by the City of New London for public purpose, in accordance with Chapter 124, Section 8-2 of the Connecticut General Statutes. However, site plan approval review by the Planning and Zoning Commission shall be required for any further development on that parcel, as set forth in Article VIII, Section 800 of the Zoning Regulations.
- Fort Trumbull State Park shall retain its current zoning classification of WC-I.

5.2.2 *Applicability of Proposed Zoning Amendments*

The City of New London Zoning regulations are proposed to be amended as specifically provided in this Municipal Development Plan. Where controls differ

between the Zoning Regulations and the Municipal Development Plan, the more stringent shall govern.

Approvals shall follow a two-step process. In step one, a detailed land development plan and design will be prepared and agreed upon by DECD and the designated development agency (i.e. New London Development Corporation) and the selected developer. Design guidelines and review procedures as established by the development agency shall be followed. Any deviation from the MDP and the associated design guidelines must be accepted by DECD and the development agency. In step two, the developer shall seek and obtain approvals from the New London Planning and Zoning Commission in accordance with zoning provisions and site plan review requirements.

5.2.3 *Proposed Zoning Amendments for the MDP Area*

Amendments set forth below shall be applicable only to those zoning districts located within the MDP area as defined by the adopted Municipal Development Plan. The applicable zoning districts are C-1, WC-I, and WD. Outside the MDP area, all requirements of these districts as set forth in the City's Zoning Regulations and Code shall apply. Amendments for the MDP area for C-1 and WC-I are as stated below. The full regulation is presented. Text which is recommended for deletion is shown as "~~strike-through.~~" Proposed additions are shown in ***"bolded italics."*** No amendments are proposed for the WD district within the MDP.

Amendment to C-1 district regulations:

510.1 *Purpose of District.* To provide for a wide range of commercial ~~and limited industrial uses~~ along major arterials; to accommodate uses that benefit from large numbers of motorists, and business that are not intensive central business area type activities. New residential development is discouraged except in certain instances.

510.2 *Permitted Uses.* Uses Permitted shall disallow any use not listed below. Uses permitted shall be limited to those listed below and shall be subject to issuance of a Special Permit by the Planning and Zoning Commission in accordance with the requirements of Article VIII, Section 810 of these zoning regulations. Uses not specifically permitted shall be prohibited.

1) Retail stores and service businesses.

2) Business and professional offices and banks.

3) Restaurants.

4) Buildings and mixed uses subject to the following requirements.

   a) All lot and bulk requirements for each use are satisfied.

   b) Separate entrances and exits shall be provided for residential and non-residential portions of the building.

5) Research and development uses, provided that any manufacturing shall be limited to prototypes and products testing.

~~510.2 Uses Permitted subject to issuance of a Special Permit by the Planning and Zoning Commission in accordance with the requirements of Article VIII, Section 810 of this regulation.~~

~~1) Retail stores and service businesses.~~

~~2) Business and professional offices and banks.~~

~~3) Wholesale businesses, warehouses, and building material storage and sale, but excluding storage of coal, coke, fuel oil, or junk.~~

~~4) Cold storage plant, beverage distributor, baking and other food processing plant that is not offensive, obnoxious, or detrimental to neighboring uses by reason of dust, smoke, vibration, noise, odor, or effluent.~~

~~5) Motor vehicle sales, including the sale of recreation vehicles and trailers and boat sales, with accessory repair facilities subject to the following requirements:~~

   ~~(a) Outdoor area lighting shall be that generally required for security purposes.~~

   ~~(b) Entrance and exit driveways shall not be located closer than 10 feet to any interior property line; and shall be so laid out as to avoid the necessity of any vehicle backing out into any public right of way.~~

   ~~(c) Vehicle lifts or pits, dismantled vehicles, and all parts and supplies shall be located within a building enclosed on all sides.~~

   ~~(d) All services or repair of motor vehicles shall be conducted in a building enclosed on all sides. This requirement shall not be construed to mean that the doors to any repair shop must be kept closed at all times.~~

   ~~(e) Gasoline or flammable oils in bulk shall be stored fully underground, in conformance with applicable codes.~~

6) Auto Washes.

7) Restaurants.

8) Fast food restaurants, provided that eating on the premises of the fast food restaurant shall be permitted only inside the structure or in areas specifically designated and properly maintained outside of the structure.

9) Animal hospitals and boarding and/or breeding of animals, provided that no outdoor runs shall be permitted within 100 feet of an R or NB district.

10) Dry cleaning establishments and laundromats.

11) Funeral parlors.

12) Retail sale and accessory storage and display of garden materials, supplies, and plants, including nursery operations, provided that the outdoor storage of display of plants and material does not obstruct pedestrian flow or vehicular traffic and does not occur within five feet of a property line.

13) Places of worship.

14) Printing plants.

15) Private transportation service including garage and maintenance facilities.

16) Taxi station.

17) Auto rental.

18) Radio, television and recording studio.

19) Arts and craft studios or studios for teaching the performing arts.

20) Motor vehicle service stations or gasoline pumps as part of another use, provided that:

(a) No traffic hazard affecting the public safety will be Present.

(b) No sale of gasoline shall be permitted to be established on any lot within a distance of 500 feet of an existing gasoline or filling station lot, or of any lot for which a building permit has been issued for the erection of such a station or any use which includes gasoline pumps.

(c) No such establishment shall be within a distance of 200 feet of any school, public or private; religious institution, hospital, library, park, nursing home, extended care facility, or any similar institution or other place of public assembly; said distance to be measured in a straight line along or across a street between the nearest points of each of the lots or premises, regardless of the district where either premises is located.

(d) No such establishment shall be within a distance of 70 feet of any abutting R or NB district.

(e) Entrance and exit driveways shall not be located nearer than 10 feet to any interior lot line; and shall be so laid out as to avoid the necessity of any vehicle backing into any public right of way.

(f) Vehicle lifts or pits, dismantled automobiles, all parts or supplies, goods, equipment, materials, refuse, garbage, or debris shall be located within a building enclosed on all sides.

(g) All service or repair of motor vehicles shall be conducted in a building enclosed on all sides. This requirements shall not be construed to

mean that the doors to any repair shop must be kept closed at all times.

21) For structures built prior to November 3, 1983, single family, two family and multi-family dwellings may be permitted in accordance with the density requirements of the R-3 District. Only new multi-family residential dwellings may be permitted in accordance with the R-3 District lot and bulk requirements. (Amended 10/7/93)

22) Buildings with mixed uses subject to the following requirements:

(a) All lot and bulk requirements for each use are satisfied.

(b) Separate entrances and exits shall be provided for residential and non-residential portions of the building.

23) Parking facilities. (Amended 6/4/85)

24) Petroleum and related fuel storage and distribution facilities which were in existence on the effective date of this regulation. (Amended 5/2/96)

25) Public and private utility installations.

26) Research and development uses, provided that any manufacturing shall be limited to prototypes and products for testing.

27) Drinking establishments, including night clubs, provided no music or noise shall be audible in any abutting R or NB District. (Amended 2/10/86)

28) Institutions for higher learning, business, vocational, and training schools, including colleges, universities, junior colleges, business, banking, business management, secretarial and office service schools, computer and data processing

schools, art and drafting schools, barber, beauty, and cosmetology schools, commercial or non-commercial food preparation schools, photography schools, schools for training in the martial arts, dancing, gymnastics, and music, schools for fashion design, under the following conditions:

(a) The curriculum shall satisfy the requirements of the Connecticut State Department of Education; on

(b) No accommodations for resident students shall be permitted.

(c) No music or noise shall be audible in any abutting R or NB district.

29) Membership clubs catering exclusively to members and their guests, and private playgrounds, swimming pools, tennis courts, and recreational buildings, subject to the following conditions:

(a) Exterior lighting other than that which is essential for the safety of users of the premises.

(b) Location of any part of the building nearer than 30 feet to any street or property line unless the property adjoins a non-residential district, in which case the yard requirements of that district shall apply.

30) Commercial entertainment establishments catering primarily to persons below the legal age for drinking alcoholic beverages, subject to the following conditions:

(a) The minimum area devoted to patron use shall be 1,000 square feet.

(b) A drop off and pick up location for vehicles near a well lighted entrance shall be provided.

(c) Off street parking areas shall be illuminated.

(d) No such use shall be located closer than 500 feet to any similar establishment or to any establishment serving or selling alcoholic beverages, except that this provision shall not apply to restaurants which provide alcoholic beverages, only from a service bar. (Amended to add this section on 5/9/85)

31) Private, public, or quasi public rehabilitation facilities to include:

(a) Outpatient, day treatment, or inpatient alcohol counseling, treatment, or rehabilitation clinics or centers;

(b) Outpatient, day treatment, or inpatient drug counseling, treatment, or rehabilitation clinics or centers;

(c) Outpatient, day treatment, or inpatient substance abuse counseling, treatment or rehabilitation clinics or centers;

(d) Non-residential or residential halfway houses for current or former inmates of federal, state, or local correctional facilities; and

(e) Other such similar outpatient or inpatient counseling, treatment, or rehabilitation clinics or centers that the Planning and Zoning Commission shall find to be substantively similar to the uses listed in Section 510.3.7, paragraphs (a) through (d) inclusive.

That any use identified within Section 510.3.7, paragraphs (a) through (e) inclusive shall be subject to the following restrictions and requirements:

(1) That such uses shall obtain all appropriate licenses and permits required by Federal, State and Local laws, statutes and regulations within (1) year of the date of approval unless an extension of the time period is applied for by the applicant prior to the actual expiration date and granted by the Planning and Zoning Commission.

(2) That such uses shall provide a minimum of 15 square feet of inside waiting or seating area space for each patron to be served within any one hour period of operation.

(3) That such uses shall not be located within 500 feet of any nursery, elementary, or secondary school, college, university building or playground.

(4) That such uses which provide residential services, either short term or long term, shall have a minimum of 70 square feet for the first resident and 50 square feet for each additional resident. (Amended 5/1/89)

32) Child Day Care Center, subject to the following requirements.

(a) The applicant shall have obtained all licenses certifications or approvals that may be required by Federal, State or local law.

(b) For each child registered, there shall be a minimum of 35 square feet of floor space exclusive of halls, bathrooms and kitchens.

(c) For each child enrolled, there shall be provided not less than 75 square feet of usable exterior open space. The Planning and Zoning Commission may authorize the substitution of interior space available for recreation

~~purposes if it determines that the aggregate space to be provided is adequate.~~

~~(d) No permanently installed play equipment shall be located in any required front or side yard.~~

~~(e) Any outdoor play area shall be screened in a manner to ensure visual and auditory privacy to adjacent properties. (Amended 8/10/89~~

~~33) Taverns (Amended 10/15/93)~~

~~34) Educational establishment for learning disabled or mentally retarded adults (but excluding adults with mental illness or drug or alcohol dependency) under license or contract with a state, federal, or municipal governmental agency. (Amended 03/02/95)~~

~~35) Microbrewery (Amended 5/2/96)~~

~~36) Structural additions to existing petroleum and related fuel storage and distribution facilities. (Amended 5/2/96)~~

510.3 *Accessory Uses*

1) Off-street parking and loading for uses permitted in this district.

2) Buildings for housing pets; children's playhouses.

3) Garden houses; greenhouse

4) Signs subject to the requirements of Article VI, Section 615.

~~5)~~ Swimming pool, tennis courts, and related recreation facilities

6) Amusement Device.

7) Fully enclosed storage.

8) Dumpster in rear yard only.

9) Accessory uses customary or incidental to a permitted use.

510.4 *Lot and Bulk Requirements*

1) Minimum lot area 5,000 square feet.

2) Minimum yards and setbacks.

   a) front – 10 feet, except new residential development must have 25 feet (see Article VI, Section 605.G.4)

   b) side – six feet; new residential development must have 10 foot side yards.

   c) rear – 10 feet except new residential development must have 20 foot rear yard.

3) Maximum height – ~~40~~ 55 feet, except the maximum height may be increased by special permit, provided that parking is created under, within, or on top of the structure, or the commission finds that the parking requirements are substantially exceeded in some other manner of off-street parking.

4) Maximum lot coverage of principal and accessory building – 80 percent, except new residential development which may occupy 50 percent of the site.

510.5 *Off-Street Parking and Loading*

Off-street parking and loading spaces shall be provided for each lot within this district in accordance

with the provisions of Article VI, Section 614 of these regulations.

Amendment to WC-I district regulations:

550.1 Purpose of the Waterfront Commercial-Industrial District. Encourage water dependent and water related industrial and major commercial use and where appropriate and feasible, public access, along appropriate portions of the Thames River waterfront consistent with the objectives of the Connecticut Coastal Management Act, and the New London Municipal Coastal Program and Plan of Conservation and Development (see Purposes of Section 540).

> 540.1 *Purpose of District.* The purpose of the Waterfront Development District is to encourage a mixture of land uses, with emphasis on waterfront access and water dependent and related uses. The City of New London contains a number of valuable waterfront areas along the Thames River, which have potential for waterfront development of different types. In accordance with the City's planning objectives outlined in the Coastal Area Management Plan (CAM) and in the Plan of Development, portions of the waterfront are to be devoted to non-industrial uses and other portions to industrial and port uses. The Waterfront Development District is designed to achieve the most appropriate use of land and structures in the predominantly marine business non-industrial portions of these waterfront areas and consistent with the design guidelines included here and in the Municipal Coastal Program adopted by the Planning and Zoning Commission.

New residential development contributing to the creation of an active water-related mixed-use district shall be encouraged, as envisioned in the Waterfront Urban Village concept that is to guide the overall development of the Fort Trumbull MDP area.

550.2 *Permitted uses.* The following water dependent and water related uses are permitted by right:

1) Public and private parks and playgrounds.
2) Yacht clubs and marinas, including uses accessory to them such as swimming pools, tennis courts, racquetball facilities.
3) Boat docks, slips, piers and wharves for fishing, yachts and pleasure boats or for boats for hire carrying passengers on excursions, pleasure, or fishing trips or for vessels engaged in fishery or shell fishery.
4) Boat and marine engine sales and display.
5) Yacht broker, marine insurance broker.
6) Rental of boats.
7) Retail sale or rental of boating, fishing, diving, bathing supplies and rental.
8) Base operations for fishing and lobstering business and the commercial bulk processing of fish and shellfish including as accessory use of such business a store or market for the sale of fish, shellfish, and other related food products.
9) Ferry boat piers and terminals.
10) Water related museums and/or educational facilities. (Amended 10/20/94)

550.3 Uses Permitted subject to the issuance of a Special Permit by the Planning and Zoning, Commission in accordance with the provisions of Article VIII,

Section 810 of these regulations. These specially permitted uses are intended to be allowed in conjunction with the permitted uses cited under Section 550.2 to the greatest extent feasible.

1) Restaurants.

2) Business and professional offices.

3) Hotels, motels and conference facilities.

4) Retail Stores.

5) Amusement Centers.

6) Commercial recreation, such as, but not limited to, tennis clubs, skating rinks, billiard parlors, miniature golf courses, bowling alleys, health clubs and uses normally accessory thereto (lockers, restaurants, retail sale of goods associated with the particular activity).

7) Buildings with mixed uses subject to the following requirements:

   (a) All lot and bulk requirements for each use are satisfied, unless otherwise modified by the Commission as permitted herein. (09/01/98)

8) Port facilities for bulk shipping and storage facilities, indoor and outdoor.

9) Manufacturing, fabrication, processing and assembly of goods and products.

10) Railroad yards, storage, service and repair.

11) A yard of building, storing, repairing, selling or servicing boats which may include the following as an accessory use: office for the sale of marine equipment or products, dockside facilities for dispensing fuel, restroom and laundry facilities to serve overnight patrons. Adequate lanes must

be provided to allow access and egress throughout the yard for fire trucks.

12) Parking facilities and structures. (Amended 6/4/85) (09/01/98)

13) Museums and/or educational facilities.

14) Drinking Establishments/Cafes. (Amended 8/07/97)

15) Laboratories as defined in Section 210 of this ordinance, including but not limited to pharmaceutical research and development facilities, and as part of an overall development plan, accessory uses such as employee fitness centers, cafeterias, helipads and other permitted accessory uses. (09/01/98)

16) Multi family and single family attached residential uses up to a maximum density as provided for below.

550.4 Accessory Uses

1) Off-street parking and loading.

2) Signs subject to the requirements of Article VI, Section 615

3) Enclosed storage.

4) Suitably screened dumpster(s).

5) Suitably screened public utility installations.

6) Accessory uses customary or incidental to a permitted use.

7) Uses which provide general public access to the waterfront. Access may be provided by any approved means including, but not limited to, easements, boardwalks, decks or other similar means. Such public access shall be identified on the site plan and shall be provided in the form of

a permanent easement acceptable to the City's Director of Law. Easements along the shoreline shall be at least 15 feet wide from the nearest public street to the water and at least 12 feet wide along the identified portion of the site shoreline. (Amended to 09/01/98)

8) Child daycare center, subject to the requirements of Section 420.3.6 herein. (09/01/98)

~~550.5 Lot and Bulk Requirements Unless otherwise approved by the Commission pursuant to Section 550.8 herein, all development within the WC I district shall comply with the following minimum standards:~~

~~1) Minimum lot area 10,000 square feet.~~

~~2) Minimum lot width 100 feet.~~

~~3) Minimum lot frontage 75 feet.~~

~~4) Minimum setbacks In no case shall new construction at the foundation line be less than 20' from the Thames River at mean high water elevation. (09/01/98)~~

~~Front yard 20 feet (09/01/98)~~

~~Side yard 10 feet (09/01/98)~~

~~Rear yard 20 feet (09/01/98)~~

~~5) Maximum lot coverage of principal and accessory buildings 50%.~~

~~6) Maximum building height 45 feet (Amended 10/20/94) (09/01/98)~~

550.5 Lot and Bulk Requirements.

1) Minimum lot area – For single-family attached residential, 2,500 square feet; for multi-family residential 1,000 square feet for each dwelling unit or rooming unit 10,000 square feet for all other uses.

2) Minimum lot width – 25 feet for single-family attached residential. 100 feet for all other uses.

3) Minimum lot frontage – 25 feet for single-family attached residential. 75 feet for all other uses. Where the Commission deems it desirable and feasible, it may approve a site plan for a use which does not have frontage on a public street, provided that the lot meets all other requirements and access is assured by covenants or other instrument acceptable to the Planning and Zoning Commission.

4) Minimum setbacks. Front Yard – 10 feet, except in no case shall new construction at the foundation line be less than 20 feet from the Thames River at mean high water level elevation.

5) Maximum lot coverage of principal and accessory buildings – 80 percent, except new residential development which may occupy 50 percent of the site.

6) Maximum building height – 55 feet, except (1) the maximum height may be increased by special permit, provided that parking is created under, within, or on top of the structure, or the commission finds that the parking requirements are substantially exceeded in some other manner of off-street parking, or except (2) as provided in Article V, Section 550.8.1.

550.6 Off-Street Parking and Loading

Off-street parking and loading spaces shall be provided for each lot within this district in accordance

with the provisions of Article VI, Section 614 of these regulations, unless otherwise approved by the Commission pursuant to Section 550.8 herein. (09/01/98)

550.7 Design Review Guidelines

The following design guidelines shall apply to all development within the WC-I district.

1) *Related Objectives and Requirements.* In reviewing a proposed development within the WC-I zone, the Commission shall consider the following:

   1. Site Plan objectives in Section 800B;
   2. Coastal Site Plan requirements in Section 840F;
   3. Municipal Coastal Program goals and objectives;
   4. if applicable, Special Permit objectives in Section 810B (09/01/98).

2) *Connecticut Coastal Management Act (CCMA)* Development shall be consistent with the applicable resources and use policies, and related goals and objectives of the CCMA. In reviewing a development proposal, in addition to other requirements of this Section, the Commission shall consider the following:

   1. The quality and extent of views from the adjacent public streets through the property to the water.
   2. The design and relationship of development to the waterfront as viewed from the water.
   3. The design and function of any easements or other access provided to and along the shoreline, including new bulkheading or docking facilities.
   4. The environmental impact on the ecosystem and the habitat of Long Island Sound.
   5. The eligibility of proposed development to utilize any of the development incentives set forth in Section 550.8 below. (Amended 10/20/94) (09/01/98)

3) *High Quality Urban Design Features* Developments shall strive to provide high quality design features, consistent with the development's purpose and setting. Landscape, site and building lighting, surface treatments, pedestrian features, walkways, signs and other similar features should all be of the highest quality of materials, installed in accordance with applicable standards and procedures and properly maintained or replaced in kind as necessary. (09/01/98)

4) *Water Quality and Resource Protection* All development shall strive to protect and enhance sensitive natural features and resources. Applicants shall integrate natural features and resources into the development plan where feasible and appropriate, and may employ a variety of measures to achieve this objective, including but not limited to remediation of contaminated soils and groundwater; best management practices to improve the quality of storm water discharge to Long Island Sound and tidal wetlands; and restoration of degraded wildlife habitats. (09/01/98)

550.8 Permitted Modifications to Bulk and Other Requirements

1) *General* In order to achieve the goals and objectives of the Municipal Coastal Program, Plan of

Conservation and Development and WC-I Zone, the Commission may provide a greater degree of flexibility in project design through approval of modifications of the zoning requirements described herein. In approving such modifications, the Commission shall consider the requirements of Section 550.7, as well as the review criteria described below. Approval of modifications is strictly limited to the requirements and provisions of this section, and shall be accomplished through approval of a special permit by the Commission. (09/01/98)

2) *Permissible Modifications and Applicable Review Criteria* The Commission may modify the following in approving a development within the WC-I zone, subject to the criteria for evaluating each proposed modifications. These criteria are in addition to those provided for in Section 840 Coastal Site Plans, Section 800 Site Plans and Section 810 Special Permits. The approval of any modifications shall also be consistent with any and all requirements of Section 800, 810 and 840 as applicable. (09/01/98)

A. Permissible Modifications in all WC-I Developments

(1) *Minimum Lot Frontage (ref Section 550.5.3)* Where the Commission deems it desirable and feasible, it may approve a site plan for a use which does not have frontage on a public street, provided that the lot meets all other requirements and access is assured by covenants or other instrument acceptable to the Planning & Zoning Commission. (09/01/98)

(2) *Minimum Side Yard Setback (ref Section 550.5-4)* The Commission may permit a reduction in the side yard to "0" if in its judgment such a reduction will help to achieve the purposes of the district. If a sideyard is provided however, it must be at least 10 feet. (09/01/98)

(3) *Maximum Building Height (ref. Section 550.5.6)* The maximum height may be increased, provided that parking is created under, within, or on top of the structure, or the Commission finds that parking requirements are substantially exceeded in some other manner of off-street parking. (Amended 12/5/88.) (Amended 10/20/94.) (09/01/98)

B. Permissible Height Modifications for Development on Lots Under 15 Acres (ref Section 550.5.6) The Planning & Zoning Commission has determined that the loss of public views of the Thames River and Long Island Sound contribute: significantly to the destruction of the character of the City as a waterfront community. As a means to protect and enhance the existing and potential, views of the water, the City has created the following incentives to encourage development that works to achieve this policy. In reviewing the special permit applications under this section, the Commission shall take! into consideration the impact of the proposed activity on visual access to the water. This consideration shall be made with the objective that waterfront property shall be developed in a manner to maximize visual access

to and from the water. (Amended 10/24/94.) (09/01/98)

(1) For every reduction of 5 percent in lot coverage below the maximum 50 percent, an additional 10 feet of building; height may be permitted up to a maximum of 90 feet; or (09/01/98)

(2) Maximum building height may be increased by 10 feet for every 10 feet the building as set back from one of the! required setback lines, up to a maximum of 90 feet of building height (09/01/98)

C. Additional Permissible Modifications for Development on Lots of 15 Acres or More. The Commission recognizes the need to provide design and procedural flexibility for complex, large scale developments which may include a mix of uses, or which may be developed in phases over a period of years. Therefore, developments on lots of 15 acres or more may apply for, and the Commission may approve, modifications to the following provisions:

(1) *Lot Coverage (ref. Section 550.5.5)* The Commission may increase maximum lot coverage from 50% to no more than 65% if the additional coverage is devoted exclusively to one or more parking structures. (09/01/98)

(2) *Maximum Building Height (ref. Section 550.5.6)* The Planning & Zoning Commission has determined that the loss of public views of the Thames River and Long Island Sound contribute significantly to the destruction of

the character of the City as a waterfront community. As a means to protect and enhance the existing and potential views of the water, the City has created the following incentives to encourage development that works to achieve this policy. In reviewing the special permit applications under this section, the Commission shall take into consideration the impact of the proposed activity on visual access to the water. This consideration shall be made with the objective that waterfront property shall be developed in a manner to maximize visual access to and from the water. (Amended 10/20/94.) (09/01/98)

a. The Commission may increase building height to a maximum of no more than 150 feet if it finds that such height is appropriate after considering the following: (09/01/98)

1. Physical constraints of the site, including soils, topography, parcel size and shape, neighboring buildings and land uses and other limitations; and (09/01/98)

2. Project design, including proposed building placement and design, grading, landscaping and similar features. (09/01/98)

(3) *Multiple Principal Buildings On One Lot (ref Section 605H)* The Commission may modify the requirements of Section

605H in order to permit a unified arrangement of buildings on one parcel. In reviewing requests for modifications of these provisions, the Commission shall consider provisions for internal vehicular and pedestrian circulation, building designs, heights and separation distances, site and building ownership and control, parking location and design, emergency access and the location and nature of abutting uses. (09/01/98)

(4) *Location of Accessory Structures (ref Section 607)* The Commission may allow accessory structures to be placed in required yards, including front yards, subject to a review of the size and design of the proposed structure, proposed landscaping and screening, the use proposed for the structure, views to the water from adjacent public streets and property, physical site limitations, operational needs of the proposed use and the location and other characteristics of adjacent uses and structures. (09/01/98)

(5) *Parking Requirements (ref Section 614)* The Commission may modify the parking requirements of Section 614, up to but not exceeding a reduction of 20% of the required number of parking stalls for a given use or mix of uses. In reviewing request for modification of these requirements, the Commission shall consider the mix and characteristics of the uses proposed, the nature of traffic anticipated, the availability of

off-site parking and/or shared parking arrangements, and the ability of emergency vehicles to service the site. (09/01/98)

(6) *Fence Heights and Locations (ref. Section 617)* The Commission may waive or modify the requirements of Section 617, to permit fences to be located closer to a property line, but only for fences in proposed commercial and industrial developments which will abut a WC-I, WD, LI-O, C-I, CBD, INST, or OS district. In reviewing such modifications, the Commission shall consider the location and nature of abutting uses, the security and operational needs of the proposed use, fence design, height and materials, maintenance provisions, site topography, views to the water, and access for emergency personnel and vehicles.

5.3 Proposed Land Use Controls

5.3.1 Overall Framework for Development

The Fort Trumbull MDP area shall be developed as a dynamic mixed-use urban district that fully develops the opportunities presented by its waterfront location and its adjacency to the developing regional assets of the Fort Trumbull State Park and the Pfizer Global Development Facility. The development of its proposed land uses shall support the formation of a vibrant Waterfront Urban Village, which binds each of its components into a highly cohesive urban district.

The integrated nature of the proposed development shall (a) increase public access and use of the waterfront, (b) maintain a community atmosphere, and (c) enhance the location's attractiveness and desirability. The establishment of strong functional, spatial and physical interrelationships between the district's various buildings, streets, public spaces and the waterfront, shall orient the development of each of the proposed land use components.

The Waterfront Urban Village concept that guides the development of the district originates in the long standing New England tradition of intimately scaled Village Centers that have developed throughout the years. Several design elements shall structure the development of the overall Waterfront Urban Village. Any proposed retail activity in this area will not be of the type that would compete with or be better suited to retail activity in the Commercial Business District of the City.

- The *Village Center*, which shall be developed around the *Village Green*, shall group the bulk of the multiple mixed-uses contained in the development program. These include hotel, retail, health club, and marina. Supporting uses such as short-term and long-term parking will be provided at a location which is conveniently accessible to the uses served. Buildings within the *Village Center* shall be designed in close relationship to each other and to the adjoining public spaces.

- The *Village Green* shall serve as the focus for the Village Center. It shall be designed to serve as the stage for special events as well for the daily life around the square. Activity generating uses such as retail, cafes and news stands shall be developed in close connection to the Village Green.

- The *Riverwalk* shall be developed as the principal means of pedestrian access to the waterfront. This promenade shall tie all the waterfront oriented uses and integrate all access from the water to the village.

- The *Gateway Area* along the spine of Howard Street shall be developed to create a distinctive arrival sequence and lead visitors into the district. It shall bind the two sides of the district together, mitigating the barrier of the existing railroad right-of-way.

- Smith Street shall be developed as an important pedestrian axis and "Main Street" within the village. It shall be the street upon which most buildings entrances within the eastern side of the district develop, and where most internal pedestrian traffic occurs on the site.

- The district's design shall take into special consideration the waterfront character of the site in accordance with the Design Guidelines contained in the current Zoning Regulation's provisions for a Waterfront District.

- The design shall maximize the quality and extent of views from adjacent public streets through the property to the water.

- Special attention shall be given to the design and relationship of development to the waterfront as viewed from the water.

- Special attention shall be given to the design and function of any easements and other accesses provided to and along the shoreline.

5.3.2 Design Control Mechanisms and Processes

In addition to the zoning controls established by the City of New London's Zoning Regulations that are proposed to be amended to include the adoption of the specific provisions which pertain exclusively to the Fort Trumbull MDP area, the district's design shall also be guided by the additional design criteria established through the Design Guidelines presented in Section 5.3.3 of this document.

Compliance with the provisions of the Zoning Regulations shall be enforced by the City Planning and Zoning Commission of the City of New London. Adherence to the development intentions described in the Design Guidelines shall be monitored through a Design Review Process administered by the New London Development Corporation.

The design guidelines are divided into two categories:

- *Category 1 Design Guidelines* – describe a fixed set of design controls that are to guide the design of streets and public spaces.
- *Category 2 Design Guidelines* – describe a flexible set of design objectives that are to guide the private development of each individual parcel.

Design guidelines will be administered by representatives from the City of New London and by representatives from the New London Development Corporation.

5.3.3 Design Guidelines

Category 1 Design Guidelines

The following Design Guidelines address street and public space design controls that pertain to the publicly funded site infrastructure that defines the overall framework for development. Those controls extend

to the privately developed public open space components that may be contained in a development parcel.

The Design Guidelines for streets and public spaces serve two purposes. They shall:

(1) maximize the ease of access by vehicles and pedestrians to the various components of the site; and

(2) lay the framework that shall provide the most advantageous orientation to each development component.

The streets should also set the general scale and character for the district. As such, they shall be designed to create an inviting and human-scaled pedestrian environment that generates the level of activity that is envisioned to develop throughout the district. This level of activity is closely linked to the overall objectives of providing enhanced access, security, and attractiveness to the district. Streets and public spaces shall be appropriately scaled to meet these dual demands. A hierarchy of street types and designs shall be developed to address the different requirements of each individual development parcel.

The following general and site-specific guidelines address the above stated objectives:

- Curb cuts and other discontinuities in the street pattern shall be kept to a minimum.
- Loading areas, electrical transformers, off-street parking adjacent to the streets, trash storage areas, and other such elements shall be screened appropriately.
- The design of streets shall incorporate a well-developed and consistent set of elements that are

to be applied throughout the district as appropriate. These elements shall include all manner of street furniture, paving materials, plant materials, signs, and the like. They shall be consistently applied throughout streets and public spaces, as well as within each development parcel. These elements shall serve to unify the district and enhance its overall identity.

- The design of streets shall serve to enhance the quality of the pedestrian environment within the district. Special attention shall be paid to the flow of pedestrian circulation through the provision of specially marked crosswalks, sidewalk trees, proper signage, and well-developed walkway connections to the waterfront and other public amenities.

Street Classification and Description

Arterial Road / Principal Access – Howard Street – As the principal arterial road serving the entire district, Howard Street shall serve as the main gateway into the site. As a predominantly vehicular environment, the design and furnishings of the street shall develop at a scale large enough to orient the drivers towards their destinations, as well as signal their arrival into the revitalized and transformed district. Building and landscape elements along this spine shall develop the gateway concept to mark the arrival into the district. Of special importance in this respect is the intersection of Howard and Hamilton Streets and the traffic island beneath the railroad right-of-way between Howard and Nameaug Streets. This area shall be handsomely landscaped on both sides of the railroad right-of-way and special consideration shall be given to making the transition under the railroad underpass appear more like an inviting threshold than as a

barrier between the two sides of the district. Generous lighting and landscape elements shall be employed at this "hinge" that shall connect the two sides of the district.

The proposed traffic "roundabouts" (refer to Section 5.4.5) at the intersection of Howard Street at Shaw Street and at the intersection of Pequot Avenue at Trumbull Street also provide an opportunity to make a "gateway" statement. The center of the roundabouts and selected medians and islands will be landscaped to serve as an inviting gateway to MDP development sites and the Pfizer Global Development Facility and to visually soften proposed paved areas.

Collector Road / Primary Vehicular Spine – Nameaug and Walbach Streets – As the principal collector roads into the heart of the site, Nameaug and Walbach Streets serve as the primary vehicular spines that provide access to all of the uses within the area.

Nameaug Street has a significant vehicular function as it meets major intersections and develops parallel to the railroad right-of-way. The edges of this street shall be treated unequally to reflect their differing functions. The west side shall be landscaped to soften the impact of the looming embankment adjacent to it and minimal, if any, sidewalk provisions shall be made. The east side, on the other hand, shall contain the street's main sidewalk, and perhaps all its furnishings, including tall lighting elements, such as those on Howard Street. A signature landscape treatment shall be developed along the length of this side of the street. This may consist of low walls, berms, plant material or any other such elements that provide visual interest but do not block the views into the site from the overhead trains or from the cars on the ground. This element shall be developed in coordination with the Pfizer development in order that

it may seamlessly extend along the whole length of the entire site, tying all its uses to an easily recognizable principal "campus" drive.

Walbach Street, on the other hand, shall have a more urban orientation, as it is to serve as the main perpendicular access into the site, and as the gateway into the Fort Trumbull State Park. As such, Walbach Street shall be afforded special paving treatment and furnishings. While a symmetrical treatment of the street section is appropriate for the development of trees and furnishings, the side facing the regional Water Pollution Control Facility shall be heavily landscaped to effectively obscure the view of the plant. Such landscape shall consist of berms, fences, and profuse vegetation that screen the presence of the plant from the street.

Local Roads /Primary Pedestrian Spine – Smith Street – This street is the principal pedestrian spine of the district and the "Main Street" along which the district's principal land uses meet. This street will have low vehicular traffic volumes and high pedestrian circulation, as it lies at the center of development and is to lead pedestrians to the Village Green. The street's dimension shall be designed to allow for the creation of a human-scaled pedestrian environment. Building entrances shall be oriented towards the street. Uniform building heights and facade regulating lines shall reinforce the cohesiveness of the street. Sidewalks shall be ample and well appointed, with special paving materials and street furnishings. It is recommended that short-term street parking be provided in pockets on both sides of the street, to allow for a level of activity and security to develop throughout the day. Trees shall be of the appropriate type and spacing as to enhance the street, yet allow the space and its long views to the water to be perceived.

All of the above elements shall be developed in a cohesive manner to integrate the surrounding land uses and create a rich and vibrant streetscape at the heart of the district. South of Walbach Street, however, Smith Street shall have a different character. This portion of the street is to serve more as a secondary street. As in Walbach Street, the west side of Smith Street is bound by the Water Pollution Control Facility, requiring the same intensive landscape screening treatment Street trees and on-street pocket parking shall be part of the street design, as in the northern portion of Smith Street.

Local Roads – Trumbull and East Streets – These streets serve as secondary local roads within the district. While both sides of Trumbull Street shall require landscape buffers as they cross the Water Pollution Control Facility, these need not be as elaborate as those required along Walbach and Smith Streets. East Street, whose east side will face Fort Trumbull State Park, is a more important local street, and shall establish a clear edge definition between the district and the park. The eastern side of the street shall develop differently, with taller lighting elements serving a wide sidewalk promenade along the edge of the park. The western edge of the street shall have a smaller neighborhood scale with smaller sidewalks and a dense row of sidewalk trees defining the parcel's edge. View corridors shall be maintained at the ends of East Street to afford unobstructed views of the Thames River beyond.

Public Space Classification and Description

Village Green – The Village Green, located within Parcel 1 at the heart of the district, shall be the emblematic space and principal focus of activity in the district. The Village Green provides the common

ground upon which a diverse array of mixed uses meet and function in direct reference to the waterfront upon which the Village Green shall open. These uses include the Conference Center, and retail uses: In addition, the Village Green is located at the confluence of the main pedestrian spine of Smith Street, the Riverwalk pedestrian waterfront access, and the terminus of the predominantly vehicular Nameaug Street. Given the demands of these uses on this limited area, it is important to carefully sort out and appropriately address the varying requirements of each of these land uses and site amenities.

As the principal feature that creates a valuable address for the various uses fronting it, it is important that the Village Green be planned and designed with special attention to its imageability, cohesiveness and relationship to the waterfront. This is necessary in order to achieve the engaging and people friendly environment envisioned. It is important that the vehicular demands of surrounding uses be satisfactorily addressed in order to preserve the overall quality of this environment.

Development shall observe the following guidelines:

- Buildings surrounding the Village Green shall clearly and unambiguously define all edges of the space and face a principal entrance towards it.
- The streetwall of buildings defining the Village Green shall be designed employing common building heights, regulating lines, building materials, and other design elements.
- The geometry, scale, proportion, and furnishings of the Village Green shall be consistent with those of a traditional New England green. Consistency with that tradition shall not lead to mimicry of historic styles. Thoughtful reinterpretation of tradition shall guide the design of buildings and landscape. Special materials shall be employed throughout the Village Green's streets and sidewalks.
- The Village Green's principal orientation shall be to the waterfront. It shall integrate the Riverwalk, and act as an extension of it, tying the Riverwalk to the Village Center.

Riverwalk – The Riverwalk is to be the principal means of pedestrian and bicycle access along the waterfront. Each of the parcels with waterfront shall include free public access along the shoreline. In parcels 1 and 2, the Riverwalk shall consist of a 30-foot right-of-way that is to accommodate a 15 to 25-foot pedestrian/bicycle path, with a five to 15-foot landscaped buffer. The Riverwalk shall be appropriately furnished with lighting, seating, and special features. The Riverwalk shall be developed in a manner consistent with the objectives of the Waterfront District to allow for safe, attractive, and convenient access to the waterfront. The Riverwalk will connect with the waterfront walkway in Fort Trumbull State Park, providing direct access to the park waterfront.

In Parcel 4B, access will be provided to the southern terminus of the Fort Trumbull waterfront walkway. A walkway of six to 10 feet in width will provide public access along Bentley Creek on the south side of the regional Water Pollution Control Facility. Bicycle access will be provided via Trumbull Street. Both will connect with the interpretative nature walk being developed by Pfizer alongside their Bentley Creek marsh restoration project. Any future development of Parcel 4B properties will incorporate public access along the waterfront in a similar manner to provide

the greatest extent of public enjoyment of the waterfront by the community.

Category 2 Design Guidelines

The following guidelines address the design objectives that shall guide the development of each individual parcel.

The Fort Trumbull MDP area shall be developed as a well-coordinated and mutually reinforcing series of developments. Each development stands to benefit from the synergy that will be generated by each parcel's contribution to the creation of a vibrant and cohesive urban district. This strategy is key to enhancement of the area's overall accessibility, security, and attractiveness. Adherence to the provisions of the guidelines will ensure that the parcels are not developed in isolation to each other.

In general terms, the development of the parcels shall observe the following guidelines:

- The ground floor of buildings shall be oriented toward the major pedestrian streets. Building entrances, retail, and other activity generators shall open directly onto the sidewalks.
- Building massing shall be generally developed to define major streets and create streetwalls to define and enclose public spaces and demarcate the limits of the parcels.
- Where building massing is not employed to define streets, landscape, walls, fences, and street furnishings shall help define the streetscape and establish a human scale for pedestrians.

- Vehicular entrances, loading docks, and parking shall be located away from principal pedestrian areas and screened from view.
- Standard building heights, cornices, and regulating lines shall be employed in the design of buildings fronting Smith Street and the Village Green.

The following specific guidelines pertain to each parcel within the MDP:

Parcel 1 is intended to accommodate a variety of uses relating to the development of a 200- to 250-room conference hotel. The development of the hotel and its associated uses will form the nucleus of the Waterfront Urban Village. The development of these uses shall be organized around the Village Green, whose design shall follow the public space guidelines. The major building, which consists of the hotel, shall face the waterfront to the east and north of the site to take advantage of the river views and engage the adjacent marina at ground level. The hotel shall present a formal entrance to the south, with a facade facing the Village Green, to play a key role in the definition of that space. Service function and other back-of-house spaces shall be located away from the waterfront. Parking facilities (for an estimated 375 cars) shall develop between the hotel and the railroad right-of-way to the west. Access to the parking shall be provided directly from Nameaug Street, without the need to circulate through the Village Green. Adequate drop-off areas may be developed within the Village Green proper, however, additional drop-off and passenger loading may develop between the hotel and the parking so as to minimize the impact of traffic on the Village Green.

The waterfront perimeter of the site shall be reserved for the development of the Riverwalk and marina space. These elements shall engage the hotel's outdoor public areas and connect directly to the Village Green.

Parcel 2 is intended to ~~a~~accommodate the development of a community of new residential units. This residential component will be the most important element in guaranteeing around-the-clock activity and the stability of the district. It shall be designed as an integral part of the Urban Village at the same time that it is designed to ensure the privacy and security of its residents. The development shall actively engage the district's public streets and spaces, particularly those along Smith Street and the Village Green. Building entrances shall face the street to the greatest extent possible. Vehicular access shall be avoided or minimized along these streets, and parking garage entrances shall not be allowed along them.

The overall development of the residential units shall place special emphasis on its relationship with the waterfront. View corridors shall be developed within the site to allow as many views of the water as possible from adjoining streets and from major common spaces within the development. The East Street view corridor shall extend to the site uninterrupted. The best views of the water; occurring to the north of the site, shall be maximized through these view corridors.

Access to the Coast Guard facility located east of the site shall be provided through the parcel in the manner that is least intrusive to the development.

Parcel 3 is intended to accommodate the development of 90,000 square feet of office/R&D space, in addition to the site designated for the Health Club.

Office/R&D space shall ~~be~~ oriented as to be highly visible from the railroad right-of-way and Nameaug Street. Development shall avoid a southern orientation that faces the wastewater treatment plant. The building massing shall be employed to clearly define the parcel's corners, and whenever possible to define as much of the parcel's perimeter as practicable. Particular attention shall be paid to the development of the corner of Nameaug and Walbach Streets, which marks the entrance into the eastern side of the district.

Special consideration shall be given to the integration of the office buildings with the ~~Smith~~ Street streetscape. The differing scales of the residential and office buildings that may develop on both sides of the street shall be adjusted to create a balanced urban streetscape along both sides of this important axis. The pedestrian scale of the street shall be recognized by the orientation of building entrances towards the street, by the provision of space defining elements such as walls and vegetation to define the street edges, and by the thoughtful placement and massing of the office buildings.

Parcel 4A is intended to accommodate the development of support facilities for a marina, or a marina training facility, to be developed to the south on Parcel 4B and the Fort Trumbull State Park to the east. Any development of ancillary buildings that may be located on these two parcels shall be oriented to help define their edges, in particular those of Walbach and East Street. Surface parking developed on either of these parcels shall be appropriately screened.

Parcel 4B is intended to accommodate a mix of water-dependent uses centered around the rehabilitated Fort Trumbull Marina, which will provide boat slips and upland support. The Marina may be developed as

a working marina training center, with facilities designed in conjunction with improvements made to Parcel 4A.

Parcels 5A, 5B and 5C are intended to accommodate the development of office/R&D space. Development along these parcels shall be oriented along Howard Street, maximizing the street frontage of buildings along the street. At the intersection of Howard and Hamilton Streets, where the district begins, the massing of buildings shall be developed to form a gateway that appropriately marks the district's entrance. Development of landscape and any other features on the parcels shall serve to visually reinforce the Howard Street corridor.

Parcel 6 is intended to accommodate the development of water-dependent commercial uses. The overall parcel development shall place special emphasis on its relationship with the waterfront. View corridors shall be developed within the site to allow as many through views to the water as possible from adjoining streets.

Parcel 7 is intended to accommodate the development of Office/Research and Development space. The development of this parcel shall be oriented along Pequot Avenue and maximize its street frontage. It shall also be designed in relation to the adjacent Pfizer Global Development Facility.

5.4 Proposed Public Utilities, Services, and Roadway Network

5.4.1 Water

Please refer to Section 4.7.1 of the Final EIE as well as Section 3.3.1 of the subject document for additional information on water supply to the MDP area. Also note that modeling of the water distribution system

within the project limits has concluded that the system capacity must be improved. The existing and proposed water system is shown on appended Map 3.3. Meetings have been held with representative of PSG to discuss the system. The City of New London/PSG recognizes the need for improvement in this area. They have delayed any improvement in this area due to uncertainty of the course of proposed development.

Analysis of Proposed Improvements

Proposed improvements to increase pressure, fire flow, and overall water supply performance to the peninsula were analyzed. In order to improve flows at the Smith Street location, the following three options were identified:

- *Smith Street Option 1* – Installation of a new water main to replace the existing 8-inch water main within Smith Street;
- *Smith Street Option 2* – Installation of a new water main located within the new access roadway (Nameaug Extension) to the proposed hotel; or
- *Smith Street Option 3* – Similar to Option 2 except with the addition of an 8-inch water main connection from the access roadway to existing Smith Street 8-inch water main near the existing Goshen Street intersection.

Only the latter two options were computer analyzed since their proximity to the water supply source will provide for the best results. However, replacing the 8-inch water main within Smith Street would produce comparable results.

Fire flow simulations (3.000 gpm) for Option 2 were performed for different size piping ranging from eight

to 12 inches and for different pipe roughness coefficients to predict flows for newly constructed and 25 year-old pipe (C_{HW} = 130 and C_{HW} = 80, respectively). The following results were observed:

Table 5-1
Smith Street Option 2
Proposed Pressure (psi) for
Maintaining 3,000 gpm Fire Flow

Street Component	*Option 2*	
	C_{HW} = 130	C_{HW} = 80
8-inch	10	-50
10-inch	38	15
12-inch	50	38

Results for Option 3 did not provide significant improvements to those observed for Option 2. Therefore, Option 2 is preferable, with a 12-inch diameter pipe.

To improve conditions at the East Street and Trumbull Street intersection, two options were analyzed. These options are as follows:

- *East Street/Trumbull Street Option 1* – Installation of a new water main loop on East Street, Trumbull Street, and Smith Street connected to the existing 12-inch water main at Walbach Street; or
- *East Street/Trumbull Street Option 2* – Installation of a new water main within East Street connected to the existing 12-inch water main at Walbach Street.

Fire flow simulations at 3,000 gpm for both options were performed for different size piping ranging from eight to 12 inches and for different pipe roughness coefficients to predict flows for newly constructed and

25 year-old pipe (C_{HW} = 130 and C_{HW} = 80, respectively). The following results were observed:

Table 5-2
East Street and Trumbull Street Intersection
Proposed Pressure (psi) for Maintaining
3,000 gpm Fire Flow

Street Component	*Option 1*		*Option 2*	
	C_{HW} = 130	C_{HW} = 80	C_{HW} = 130	C_{HW} = 80
8-inch	58	45	40	10
10-inch	64	60	54	45
12-inch	66	64	60	55

Recommendations

Improvement of pressure, fire flow, and overall water supply performance to the Smith Street area near the proposed hotel will require the installation of a 12-inch water main. This new water main should be installed within the new access roadway, Nameaug Extension, or as a replacement of the existing 8-inch water main within Smith Street.

Installation of an 8-inch water main loop within East Street, Trumbull Street, and Smith Street will provide adequate results for improving conditions at the East Street and Trumbull Street intersection. In addition, the existing water mains serving the latter location are undersized and should be replaced. For provision of adequate pressure and flow to fire hydrants, a generally accepted practice in design and construction of water supply systems is to maintain distribution main piping eight inches or greater in diameter.

The MDP area includes portions of the Fort Trumbull peninsula that were occupied by NUWC. Water service in this area is operated by the federal

government. Once the NUWC property has been conveyed for development purposes and the utility services are upgraded or reconstructed to serve private development sites (portions of Parcel 1 and all of Parcel 2 as shown on Map 5.1), water service will be provided to those sites via existing or reconstructed water mains located in Smith Street and operated by the City of New London. In addition, a utility easement will be created between Smith Street and the existing Coast Guard station at Fort Trumbull. Municipal water and sewers as well as other private utility lines will be extended to serve the Coast Guard.

5.4.2 Sanitary Sewer

The existing and proposed sanitary sewer systems are shown on appended Map 3.4. Please note that Section 42.1 of the Final EIE is hereby replaced in its entirety with the following discussion.

Sanitary sewers are located on almost all streets within the MDP area, including the NUWC property. The City of New London operates its regional Water Pollution Control Facility on Trumbull Street within the project area. Flows from the MDP area are expected to decrease and plant capacity is not a concern. Furthermore, plans are underway to improve the plant. It is anticipated that all discharges to the sewers will be domestic waste. It is assumed that any industrial waste generated will either be minimal, or will be contained in a closed loop system and treated internally.

Capacity of the sewer network is not expected to be a problem in the 8-inch to 10-inch diameter sewers east of the railroad, because these sewers only convey flow from the MDP area. The total daily flow from the project is estimated at 0.08 million gallons per day

(mgd). The existing pipe with the least capacity is the 8-inch diameter pipe in Goshen Street at a 0.5 percent slope and a capacity of 0.5 mgd.

It is anticipated that the 10-inch diameter main in Smith Street, installed in 1914, will be replaced. This pipe is constructed of clay and, given its condition, connection of new services would be difficult. The cost to repair the road after installation of the sewer will be minimal, since other utility work is planned and the road is slated for reconstruction. This pipe will serve as the main sewer line to which laterals will be connected. Short segments of existing sewers on Walbach Street, East Street and Trumbull Street can remain. These will be reconnected to the new sewer in Smith Street.

The existing sewers throughout the NUWC property will be removed. These sewers meander around the buildings that they serve, with numerous manholes and pipe segments that would require significant future maintenance efforts. Additionally, their locations would not be compatible with the proposed building layout. Upon development of parcels, new sanitary sewers will be constructed that will connect to the sewer system in Smith, Walbach, or Trumbull Streets. Service will need to be maintained to the Coast Guard facility, as it will remain. The Coast Guard is presently in the process of acquiring a right-of-way around the entire peninsula for use as access to their facility, as well as utility services. Other routes for utilities through the development, as well as a new sanitary sewer service, are also being investigated.

The 30-inch gravity sewer in Howard Street from Hamilton Street to Walbach Street is a main sewer line that receives sewage from a network of collector sewers in the northern portion of New London. Records of the actual daily flow in this sewer could not be

obtained. The stretch of 30-inch diameter sewer through the project has a slope of 0.16 percent and a capacity of 10.5 mgd. The total daily sewage from the project area is expected to decrease from 0.11 mgd to 0.08 mgd. The total flow from the project area east of the railroad is estimated at 0.012 mgd, which is 0.1 percent of the capacity of the 30-inch sewer. It is therefore anticipated that sewers from the development parcels can be connected to this sewer.

Planned improvements to the New London Wastewater Treatment Facility (WWTF) include both operational improvements and aesthetic enhancements, which have been designed by consulting engineers Camp, Dresser & Mckee Inc. The funding designated for these WWTF enhancements is not included in the MDP project cost total identified in Chapter 8, and contracts for this work will not be administered by the NLDC.

Phase I of the WWTF enhancement includes Nitrification/Denitrification, sludge pumping building equipment, electrical service equipment, and site improvements to the southern portion of the facility, including modifications to the retaining wall and fencing boundaries. Phase II of the enhancement project includes sludge pumps, clarifier covers, and odor control improvements, as well as landscaping and fencing along Smith, Nameaug, and Trumbull Streets. Over $9,000,000 is required for accomplishing both phases of this project.

5.4.3 Storm Sewer

The existing and proposed storm sewer systems are shown on appended Map 3.5. Please note that the Section 4.7.1 of the Final EIE is hereby replaced in its entirety with following discussion.

Conventional engineering design and current "best management practices" have been used to derive the information in this document and will also be used to design the storm drainage systems. In general, stormwater discharges from construction sites where five or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The DEP Bureau of Water Management has issued a general permit that will cover these discharges.

Registration, describing the site and the construction activity, must be submitted to the DEP prior to the initiation of construction. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management. must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the DEP. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. Another requirement of this permit is that stormwater discharges located less than 500 feet from a tidal wetland must be discharged through a system designed to retain the volume of stormwater runoff generated by 1 inch of rainfall on the site.

Appropriate controls, designed to remove sediment and oil or grease typically found in runoff from parking and driving areas, will be included in any stormwater collection system to be installed at the site. Non-structural measures to dissipate and treat runoff are encouraged, including infiltration using pervious paving, sheetflow from uncurbed pavement and vegetated swales. If a stormwater collection system is installed, potential controls include gross particle separators, deep sump catch basins with oil-grease traps and/or detention/retention basins.

The DEP typically recommends that any catch basins installed in conjunction with roadway or parking lot paving should have deep sumps to trap sediments and hoods to trap oil and grease. Ideally, all catch basins should be equipped with hoods. However, at a minimum, the last catch basin in a series will be equipped with a hood.

If more than one acre of pavement drains to a common discharge point, a gross particle separator should also be installed. Advanced designs for gross particle separators have been developed, such as Vortechnics, Downstream Defender and Stormceptor, that the DEP believes are very effective in removing contaminants. The Stormceptor is designed to treat runoff from areas up to approximately one acre in size, while the Vortechnics and Downstream Defender can be sized to accommodate flow from larger areas. It is recommended that the appropriate variety of this or similar type of unit with a cyclonic design be installed in conjunction with each outfall, depending on the size of the drainage area. Provisions should be made for the periodic maintenance that will be required to insure continued effectiveness of these control measures.

Stormwater management for any potential parking garages typically should involve two separate collection systems designed to treat the runoff from different types of parking areas. Any exposed parking lots will produce a high volume of runoff with relatively low concentrations of pollutants. Runoff from such areas should be directed to the storm sewer system and the collection system should include controls to remove sediment and oil or grease. A gross particle separator at each outfall as discussed in the preceding paragraph is recommended for this purpose. Interior levels of parking garages will produce a low volume of runoff with relatively high concentrations of pollutants. Runoff from such areas should be directed to the

sanitary sewer system, again with appropriate treatment. An oil separator tank with a capacity of at least 100 gallons is required. A licensed waste oil hauler must clean the tank at least once a year.

The proposed stormwater management for the project area consists of the following:

- Installation of a new trunk line that originates at the low point in Smith Street to replace the existing storm sewer trunk line(s) that outlets into Columbia Cove;
- Installation of a new storm sewer that originates in Walbach Street at Goshen Street, into Nameaug Street Extension, along Hamilton Street with an outfall into Columbia Cove;
- Installation of a stormwater pump station for the Walbach Street railroad underpass that discharges to a new storm sewer;
- Improvements to the Pequot Avenue storm sewer to accommodate the new roadway geometry and relocate the outfall segment of the storm sewer between Pequot Avenue and Bentley Creek;
- Improvements/adjustments to existing storm sewers at those locations where the existing systems have adequate capacity and can remain; upgrades and outfall improvements may be necessary at all existing storm sewer outfall locations.
- Construction of new storm sewers where new roadway alignments require abandonment of the existing systems;
- Installation of deep sump catch basins with hoods and gross particle separators that incorporate the "swirl" or cyclonic technology to remove 80 percent of the suspended solids at each parcel in the future

as each is developed. The systems will be located on the individual parcel and be designed at the same time as the individual site development plans. The design of these private systems will be in accordance with applicable state, federal and local regulations and requirements and will require adherence to current "Best Management Practices" for sedimentation and erosion control as well as control of suspended solids and other potential pollutants (such as sediment, oil and grease typically found in runoff from parking lots) from stormwater runoff from parking lots and other impervious surfaces; and

- Installation of infiltration systems in the future at those parcels that will drain into a storm sewer discharging within 500 feet of a tidal wetland to retain the volume of runoff generated by one (1) inch of rainfall. The systems will be designed at the same time as the individual site development plans. The design of these private systems will be in accordance with applicable state, federal and local regulations and requirements.

The proposed Smith Street system will have the same drainage area as existing, however, the percentage of impervious area is estimated to decrease from approximately 70 to 65 percent. This will reduce the ten-year peak discharge to 48 cfs. The two parallel lines, 18-inch and 21-inch, will be replaced with a single 48-inch pipe approximately 450 feet in length. At the upstream end of the 48-inch pipe, a 36-inch pipe will replace the 15-inch pipe to the low point in Smith Street. Both pipes will require easements for the City of New London to maintain the main trunk line as they will not be in the public right-of-way and they drain a low point in a public road.

The proposed storm sewer for Nameaug Extension will have a drainage area of 14 acres, including the 5-acre drainage area of the pump station proposed for the Walbach Street low point at the railroad underpass. The peak ten-year frequency storm event discharge for this system is estimated at 29 cfs. A 36-inch pipe will extend from the outfall to the new pump station. The portion of pipe through the Village Green will require an easement. Routing the pipe around the extended-stay facility would increase the length of the system and subsequently the diameter of the pipe.

In the interim, before the parcels are fully developed, existing catch basins will have to be connected to new trunk lines. It is therefore recommended that the alignment of new pipes follow the alignment of existing drainage as much as possible unless new catch basins are installed.

The storm sewer at Pequot Avenue has adequate capacity. However, exact location and arrangement of piping of the outfall from Pequot Avenue to Bentley Creek is unknown. All available as-built records were gathered and City maintenance staff were contacted to try to determine the location. A last resort, the services of the former City Engineer were retained. Unfortunately, the outfall could not be located. As a result, it is assumed that, as a minimum, some improvements to the outfall will be necessary.

The existing drainage area to the low point in the vicinity of Howard and Walbach Streets is approximately 10 acres, with much of this area located east of the Amtrak line. The existing drainage facilities within this area are minimal and in fact this area typically floods several times each year. Since the low point in the road is only at elevation 4.5 feet NGVD, it is not possible to remedy this situation by means of a

gravity system. Therefore a limited storm water pumping station was pursued to facilitate access to the peninsula. Much of the stormwater that collects at the low point occurs as surface runoff. In order to minimize the size and associated cost of a proposed pump station, the amount of runoff collected at the low point needs to be reduced.

Proposed development of the project area east of the railroad line will include installing a new storm sewer system to serve much of this area. The primary new stormwater system will be installed along the new access road, Nameaug Extension, to the proposed hotel. This system will intercept and convey a substantial portion of stormwater runoff formerly collected at the low point, and discharge it into Columbia Cove north of the NIJWC site. The resulting drainage area to the low point would be therefore reduced to approximately five acres.

Pump Station Design

The pump station for the low point at the Walbach Street under Amtrak will be designed in accordance with the FHWA (Federal Highway Authority) design manual for "Stormwater Pumping Stations" and should meet the requirements of the Connecticut, Department of Transportation (DOT). The following provides highlights of these requirements:

- Inflow hydrology based on the 50-year storm event (HEC-1), and checked for a 100-year storm;
- Allowable high water elevation one foot below frame of lowest stormwater collection structure;
- Wet-pit station construction;

- Minimum three electric submersible pumps, each with a capacity to pump 50% of the total pump station capacity;
- All pumps to be equally sized;
- Controls to alternate lead and lag pump operations;
- Guide rails and lifting chains for maintenance;
- Grit chamber and/or other pretreatment of stormwater; and
- Standby power.

The inflow to the pumping station for the 5-acre drainage area is approximately 12 cfs (5,400 gpm) for a 50-year storm. The pump station proposed for the low point near Howard and Walbach Streets is a rectangular pre-cast concrete wet-pit station with approximately 3,360 cubic feet of storage. Pumps should be three-phase electric submersible types, sized to deliver 2,800 gpm each at a total dynamic head of approximately 13 feet. A natural gas-powered generator enclosed in a separate building will deliver electric standby power.

5.4.4 Gas, Electric, Telephone, and Cable

The Yankee Gas Company has indicated an ability to service the proposed development but has stated that they will need to upgrade the distribution system in the area in order to provide adequate service. The gas company will install their new mains based upon the actual phasing of the development parcels and the type of heating system that will be used in the individual parcels. Typically, the Yankee Gas Company will construct and pay for any upgrades or extensions of gas lines to serve commercial users, provided an appropriate return on investment can be obtained

through future gas sales to prospective users or businesses. The size and nature of proposed development of the MDP will undoubtedly provide Yankee Gas with that assurance. Costs associated with gas line upgrades and extensions, therefore, are not included in the infrastructure budgeted costs. Appended Map 3.6 illustrates the existing and proposed gas systems within the MDP area.

Each of the private utility companies serving the project area has indicated an ability to serve the proposed development. The existing and proposed telephone and electric systems are shown on appended Map 3.7.

The costs to locate the electric, telephone and cable lines underground will be significant. Preliminary estimates indicate that the costs will be over $1,400,000. These costs include pole and pole line removal, new manhole structures, and a concrete encased duct bank system with 12, four inch PVC conduits. These cost estimates factor in the potential reimbursement of part of the cost of the electric cables and their installation as currently provided for under Connecticut General Statute Chapter 130, Section 8-133a; however, pending deregulation of the electric industry may result in a situation where the electric service provider will not be responsible for transmission and therefore will have no obligation to reimburse the NLDC or the City for any costs. Negotiations are currently underway with the respective utilities relative to the cost reimbursement for relocating the existing overhead systems underground.

5.4.5 Streets and Sidewalks

Adequate and safe vehicular access to the sites comprising the MDP area is a principal consideration for

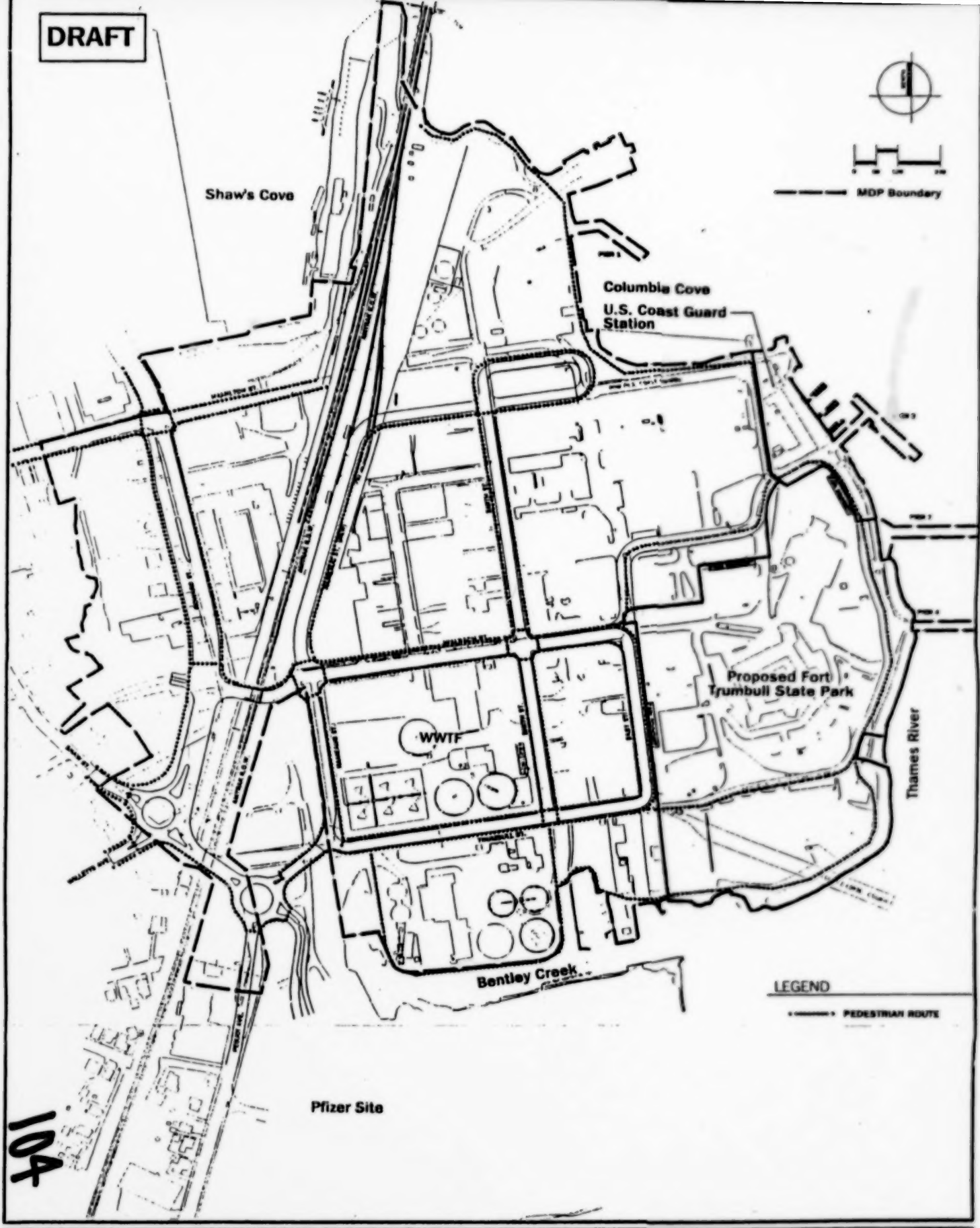
a successful redevelopment program. Street and traffic improvements will also be necessary to increase the capacity of local streets to accommodate projected traffic volumes generated by the redevelopment sites, improve roadway geometry to make the streets safer, comply with current highway standards, and create a more attractive street image. The existing and proposed streets are shown on appended Map 3.8. Proposed sidewalks are diagrammatically shown on Figure 7.

A particular challenge is to improve vehicular access to the Fort Trumbull peninsula which includes coastal areas east of the Amtrak rail corridor. Existing access points to the peninsula area are limited and deficient. Conditions of the two existing underpasses which carry traffic beneath the Amtrak rail lines at Walbach Street and Pequot Avenue are summarized as follows:

- Aged and in need of maintenance, if not replacement;
- Road beds that lie below flood elevations;
- Inadequate vertical clearances prohibiting passage of certain trucks and buses; and
- Limited horizontal clearances restricting the width and number of travel lanes, reducing the line of sight, and limiting the ability to provide bike lanes or sidewalks on both sides of the street.

One of the primary objectives of the project is to improve access to Fort Trumbull MDP area and its immediate environs while providing the following:

- An attractive "gateway" that will provide a commanding entrance to Pfizer's new campus, the proposed Fort Trumbull State Park, and the redevelopment sites of the Fort Trumbull area;



PEDESTRIAN ROUTE MAP

7

FORT TRUMBULL MUNICIPAL DEVELOPMENT PLAN

CITY OF NEW LONDON, CONNECTICUT

Prepared for: New London Development Corporation

- Improved existing and projected traffic flows from the proposed Pfizer Global Development Facility, the proposed State Park at Fort Trumbull, the proposed reuse of the NUWC site, potential commercial, industrial and/or residential development in the Fort Trumbull area, and current and future through-traffic serving other City neighborhoods;

- Improved public safety by correcting or mitigating existing flooding problems at the Walbach Street railroad underpass in order to maintain access to the peninsula during minor storms events; and

- A means for efficient and safe evacuation of the peninsula in the event of a major storm event.

The proposed road network will achieve the above goals while increasing traffic capacity on the southerly reaches of Howard Avenue and at the railroad underpasses. This will be accomplished by widening and realigning roads and constructing two modern traffic roundabouts in the vicinity of the railroad in order to increase traffic capacity, improve sight lines and provide for better and safer roadway geometry.

The proposed modern roundabouts are to be located on either side of the Amtrak rail line near the Pequot Avenue railroad underpass. One will be located at the intersection of the realigned Howard Avenue, Shaw Street, and Willetts Street and the other at the intersection of Pequot Avenue and a realigned Trumbull Street.

The modern roundabout is a type of circular intersection that has been successfully implemented in Europe and Australia over the past few decades. Despite the approximately 35,000 roundabouts in operation around the world, there are fewer than 50 that exist in the United States. Until recently, roundabouts have been

slow to gain support in this country. The lack of acceptance can generally be attributed to the negative experience with traffic circles or rotaries built in the earlier half of the twentieth century. Severe safety and operational problems caused these traffic circles to fall out of favor by the 1950's. However, substantial progress has been achieved in the subsequent design of circular intersections, and a modern roundabout should not be confused with the traffic circles of the past.

The modern roundabout is defined by two basic principles that distinguish it from a nonconforming traffic circle. Roundabouts follow the "yield-at-entry" rule in which approaching vehicles must wait for a gap in the circulating flow before entering the circle.

Roundabouts involve low speeds for entering and circulating traffic, as governed by small diameters and deflected entrances. In contrast, traffic circles emphasize high-speed merging and weaving, made possible by larger diameters and tangential entrances.

The number of roundabouts constructed in the U.S. is relatively small, but those that are currently in operation have been reported to be performing favorably in terms of shorter delays, increased capacity, improved safety, and improved aesthetics. The roundabouts have resulted in an overall reduction in the number and severity of accidents, despite the initial concern that lack of familiarity with this type of intersection would lead to driver confusion.

Roundabouts can produce operational improvements in locations where the space available for queuing is limited. Roads are often widened to create storage for vehicles waiting at red lights, but the reduced delays and continuous flows at roundabouts allow the use of

fewer lanes between intersections. Possible applications may be found at existing diamond interchanges, where high left turn volumes can cause signals to fail. By constructing a pair of roundabouts at the ramp intersections, capacity improvements to the interchange can be accomplished without the costly requirement of widening the structure to carry additional lanes over or under the freeway.

The twin roundabouts proposed for the Fort Trumbull MDP will result in operation improvements similar to those noted in the preceding paragraph for diamond interchanges. Due to the limited horizontal clearance that exists in the roadbed beneath the Amtrak rail underpass at Pequot Avenue, there is limited opportunity to add lanes for traffic capacity and queuing of vehicles. New traditional signalized intersections were investigated for the Howard-Shaw-Willets intersection and at the Pequot-Trumbull intersection in order to accommodate the increase traffic volumes anticipated for the MDP area, the Fort Trumbull State Park and the Pfizer Global Development Facility.

Due to the need for new turning lanes and travel lanes for capacity and storage behind traffic signals, certain left turns will be prohibited and many additional lanes of traffic will need to be constructed. Five lanes were required at Howard Ave. Four lanes were required under the Pequot Avenue underpass, which required a reduction in lane width and shoulders and three lanes on Pequot Avenue.

The twin roundabout design typically requires only one entering lane at each leg of each roundabout. This allows for fewer approach lanes on Howard Avenue and Pequot Avenue. An exception to this is the two lanes approaching the Howard-Shaw-Willetts roundabout from Pequot Avenue. This leg will have two entering lanes and therefore result in three lanes under

the Pequot Avenue railroad underpass (two northbound lanes and one southbound lane). The existing horizontal clearances at the Pequot Avenue underpass will allow for three, 12-foot wide lanes and a three-foot wide paved and striped shoulder. Pequot Avenue currently has one sidewalk along the south side of the underpass. This walk will be maintained or reconstructed.

By designing modern roundabouts at these two locations, fewer lanes will be needed, traffic flow will be facilitated, left-turn prohibitions can be eliminated, and more land will be available for landscape improvements. The roundabouts will be designed to accommodate the turning of large vehicles (semi-trailer trucks) and large emergency vehicles (fire apparatus). Careful design and placement of traffic and directional signs and proper lighting will help to make the roundabouts safe and efficient traffic intersections.

The intersections about the Walbach Street railroad underpass are proposed to be traditional, four-way, signalized intersections with signalized pedestrian crossings. Traffic volumes and turning lane needs at the Howard Avenue-Walbach Street intersection require five lanes on Howard Avenue and three lanes on Walbach Street. Currently there are two traffic lanes on Walbach Street. The horizontal clearance of the Walbach Street underpass is fixed by the granite abutments that carry the bridge structure above. To accomplish the increase to three lanes, the lanes will have to be 11 feet in width, which is less than the standard 12-foot width.

Walbach Street currently has sidewalks at each side of the railroad underpass. The southerly walk will be eliminated to provide space for the additional vehicular travel lane. Currently, however, there are no provisions for bike lanes or shoulders at either the

Walbach Street or Pequot Avenue underpasses. The construction or striping of shoulders on Howard Avenue, at the Pequot Avenue underpass, and on other streets within the MDP will provide greater safety for cyclists, however, due to space and other limitations and the introduction of the traffic roundabouts, it is not possible to meet federal requirements for a continuous bicycle lane within the MDP area. Therefore, this is not intended to be an official bicycle route. Bicycles will share the road alongside motorized vehicles as is the practice on most other streets in New London.

The planned roadway improvements also will provide increased vertical clearance for emergency vehicles at the Walbach Street railroad underpass. Current clearance is only ten feet zero inches. This will require lowering the road bed beneath the overpass and modifying the superstructure to replace the bridge beams with shallower, more efficient members. It is anticipated that this remedial construction will only provide an additional 18 inches of clearance for a total of 11 feet 6 inches. The optimal vertical clearances of 14 feet 6 inches will not be achieved. Trucks and buses therefore, will still not be able to clear the bridge. However, as the City's tallest fire apparatus is 11 feet 3 inches, it is deemed to be an important and worthwhile improvement. This grade change may impact the sanitary sewer trunk lines at the Walbach Street underpass. These utilities may have to be relocated or lowered. A contingency in the construction cost estimate has provided for this potentiality.

The vertical clearance at the Pequot Avenue railroad underpass is also deficient. Its current height is approximately 12 feet 8 inches. Several options for improving the vertical clearance at this bridge were evaluated, with the intent of accommodating large vehicles and possibly semi-trailer trucks. There are

numerous cost and feasibility issues that thwart improving the vertical clearance at the Pequot Avenue underpass as follows:

- The cost of replacing the bridge with a more efficient structure with lower profile girders would be very expensive and, even then, the optimal height of 14 feet 6 inches could not be achieved without reconstructing and elevating several thousand feet of the twin Amtrak rail lines above the bridge;
- The existing abutments of the bridge have shallow footings that would be undermined by any lowering of the roadbed beneath the underpass. The costs to underpin the abutments would be excessive and could cause temporary disruption to rail traffic;
- Numerous underground utilities, including sizable sanitary sewer trunk lines that lead to the regional Water Pollution Control Facility, exist under the roadbed beneath the underpass. These utilities have very little cover (i.e. they are buried at a shallow depth). Any attempt to lower the roadbed to increase the vertical clearance would require the removal and reconstruction of these utilities at a lower depth. The costs of this utility work would be excessively high; and
- The roadbed beneath the underpass lies at an elevation that is lower than the 100 year flood elevation. Any lowering of the roadbed would increase the likelihood of flooding during major storm events.

Considering these cost and feasibility constraints and considering that the existing height of the Pequot Avenue underpass allows for the use of the underpass by emergency vehicles, most buses, and

most commercial vehicles, it was determined that the benefits of improving the vertical clearance at this underpass did not justify the cost. Any large commercial vehicles that need to access Pfizer's Global Development Facility or the MDP parcels in the peninsula area will need to take the southern Pequot Avenue route that has been used for many years by large vehicles that needed to access NUWC, the WPCF or the former mills on Pequot Avenue.

The proposed reconstruction of the roads in the vicinity of the Amtrak line will alleviate current flooding problems. The flooding problem will also be mitigated by construction of storm chambers and high-volume pumps to discharge water resulting from storms. While these efforts will improve the current situation, portions of the roads will still be subject to flooding during extreme coastal storms (i.e. hurricanes). The impact of this flooding on emergency ingress and egress during hurricanes will be minimized by maintaining an elevation of 7.1 feet NGVD or higher on the designated evacuation route.

The evacuation route from the Fort Trumbull peninsula will lead from Walbach Street, via Nameaug Street, to the Pequot/Howard Street railroad underpass. From the underpass, Willets Avenue and Shaw Street both lead to higher ground. On the peninsula, a small southerly portion of Nameaug Street that is currently below elevation 7.1 feet will be raised to 7.1 feet or higher, including the intersection with the Pequot Avenue roundabout just east of the railroad. This places the entire evacuation route above the level of the FEMA 10-year flood (7.1 feet), and 0.7 feet above the level of the Army Corps of Engineers 10 year flood (6.4 feet).

During a hurricane storm event approaching the 100 year storm, it is possible that portions of the streets

between 7.1 feet and 10.0 feet in elevation will be subject to flooding. This flooding would only occur if the storm arrival is coincident with the timing of a spring high tide. In the event of flooding of this type, emergency vehicles are capable of operation in streets that are inundated by up to 2 feet of water. The 100 year storm flooding could result in the lowest portions of the evacuation streets that are impassable to some vehicles for as long as one hour and 35 minutes, and will be impassable to emergency vehicles due to flooding in excess of two feet for as long as 50 minutes out of the 12 hour cycle.

The proposed improvements will result in subsequent changes to the existing through-traffic or local traffic patterns. Harris Street will be eliminated and the existing alignment of the westerly portion of Trumbull Street and the southerly portion of Nameaug Street will be changed.

Effectively, all streets within the limits of the MDP area will be realigned or reconstructed within their current alignment. Some of the existing rights-of-way (ROW) of streets proposed to be discontinued, such as Chelsea Street, Harris Street, Goshen Street and portions of Trumbull Street, will be abandoned and annexed to NLDC parcels to be utilized as development sites. Where existing public utilities exist within these discontinued streets, provisions will be made for the maintenance of utility easements so that the underground pipes and other improvements can remain in use.

Other City ROW's in streets that will be realigned will be abandoned but maintained as utility corridors and/or landscaped open space areas. This will occur in

the ROW of Howard Street between Walbach and Shaw streets and limited portions of the Shaw Street ROW in the vicinity of Willetts Street. The city streets in these areas will be realigned leaving portions of the ROW that will not be necessary for traffic use. However, because the ROW's will still have underground public utilities and because these small areas are not contiguous with larger NLDC development sites, the ROW's will be retained as utility corridors and landscaped open space (the surplus existing pavement demolished and lawns and other plantings will be installed where appropriate).

One short section of existing public street, the section of Hamilton Street between Howard Avenue and the Amtrak rail line, may be converted from a public ROW to a private street. This is because the street currently may not conform to public street width and dead-end street standards as it is a narrow dead-ended street without a cul-de-sac at its terminus. The street will be improved with new pavement curbs and sidewalks in its current location to the MDP standards for a "Local Street" (see discussion on proposed MDP street hierarchy that follows). In the event that the public status of this easterly length of Hamilton Street is changed, every provision will be made to maintain access rights to existing private properties that are located on the east side of Shaw's Cove and currently utilize Hamilton Street as their principal access.

Appended Map 6.2 identifies where these existing City ROW's to be abandoned are located and what the status of the ROW's will be upon completion of the MDP.

Major components of the proposed street network include the following:

- Modem traffic roundabouts at the intersections of a realigned Howard Avenue-Shaw Street-Willetts Street and at Pequot Avenue and a realigned Trumbull Street.
- Installation of storm water pump station as described in Section 5.4.3 (Storm Sewer).
- Realignment of Howard Street between its intersection with Shaw-Willetts and its intersection with Hamilton Street;
- Realignment of the westernmost section of Trumbull Street between its intersection with Pequot Avenue and its intersection with Nameaug Street. This realignment is necessitated by the introduction of the Pequot-Trumbull roundabout;
- Widening of Howard Street between Hamilton and Walbach Street to five lanes, including a center turning lane;
- Discontinuation of Harris Street in order to improve sight lines and provide safer roadway geometry;
- Elimination of Goshen and Chelsea Streets;
- Provision of full traffic signals at the following three intersections: (1) Howard and Walbach; (2) Howard and Hamilton; and (3) Walbach and Nameaug;
- Widening of Nameaug Street between Trumbull and Walbach Street to provide better access between the Pfizer Global Development Facility and the proposed development at Columbia Cove. This change will also serve to distribute traffic more efficiently between the two underpasses and reduce the potential for traffic delays;

- The construction of a new street, Nameaug Street Extension. This street will start at Walbach Street directly across from its intersection with the existing Nameaug Street and run adjacent and parallel to the east side of the Amtrak rail line. It will provide access to the proposed development sites at Columbia Cove;
- Realignment of Pequot Avenue between the southern end of the MDP area and the proposed Pequot-Trumbull roundabout;
- Widening and improvement, including larger curb radii at intersections, as necessary of all streets within the MDP area that are to remain. These streets include Hamilton Street, Walbach Street, Smith Street, East Street and most sections of Trumbull Street. The improvements include providing new bituminous concrete pavement, curbs, handicapped ramps, driveway aprons, concrete or brick (decorative pre-cast concrete unit pavers) sidewalks and streetscape amenities (ornamental street lights, street trees); and
- Construction or reconstruction of sidewalks, handicapped ramps and painted cross-walks along both sides of most streets within the MDP boundary, with the exception of the inner loop created around the Amtrak rail embankment and bounded by Pequot Avenue, Nameaug Street, Walbach Street, and Howard Street (refer to Figure 7).

Appended Map 3.8 illustrates the proposed location and type of streets and sidewalks. For design purposes, streets within the MDP area have been classified into three categories: arterial, collector and local. The categories define a hierarchy that correlates with the degree of traffic than the street is intended to carry.

Arterials will not only provide access to the development sites, but will also carry through-traffic. They must be designed to carry the high level of traffic and will therefore be of higher design. Accordingly, the character of the streetscape on arterials will be less intimate that the collector and local streets. For example, light standards on arterial streets need to be much taller to provide illumination across a wider expanse of pavement.

Collector streets will carry less traffic than the arterials and will act as conduits between development sites and the arterials. Local streets will have the least amount of traffic and will not serve through-traffic. They will be narrower and more intimate in scale and therefore relate better to the more quiet character of the residential neighborhoods.

Table 5-3 summarizes the character of proposed improvements for each of the three categories of proposed or reconstructed streets. More specific traffic and street plans will be developed based upon the following:

- Further refinement of development plans of the MDP area;
- Additional investigation and study of the various engineering, traffic, environmental, cost, planning and safety issues; and
- In consideration of comments received from the public and regulatory agencies.
- To determine the most suitable network of streets and sidewalks to provide safe efficient, and attractive access to the Fort Trumbull area.
- Provides for streets and utilities to be constructed under a detailed phasing and "maintenance and protection of traffic" plans to minimize disruption of traffic patterns, maintain access to

private sites, minimize length of utility service shut-offs and to ensure continuous access to surrounding properties by emergency vehicles.

Table 5-3
Summary of Proposed Street Characteristics

Street Component	*Arterial Street*	*Collector Street*	*Local Street*
Sidewalk type	concrete	concrete	pre-cast concrete pavers
Sidewalk width	6 feet	5 feet	5 feet
Snow shelf width	5 feet	5 feet	5 feet
Bike lane/ shoulder width	5 feet	5 feet	2 feet
No. of traffic lanes	5	2-3	2
Traffic lane width	12 feet	12 feet	12 feet
Total right-of-way width	94 feet	56-68 feet	50 feet
Light standard type	"cobra head"	Ornamental	ornamental
Light standard height	30-35 feet	18-20 feet	12 feet
Light standard spacing	150 feet O.C.	60 feet O.C.	42 feet O.C.
Light standard location	both sides of street, alternating	Both sides of street, alternating	both sides of street, alternating
Street tree location	3 trees between each light standard	2 trees between each light standard	2 trees between each light standard
Street tree spacing	75 feet O.C. both sides	40 feet O.C. both sides	28 feet O.C. both sides

5.4.6 Riverwalk

The Riverwalk will provide a practical pedestrian and bicycle alternative to vehicle transportation on streets within the Fort Trumbull peninsula area. The Riverwalk will be accessible at several locations. Within the peninsula area, users needing parking can access the Riverwalk via the state park (including park support parking), or from City streets in the vicinity of the Village Green. It is expected that peninsula residents, hotel/conference center guests, and health club patrons would also use the Riverwalk. A through link to the City of New London Downtown Waterfront Park may be provided at the north end of the peninsula, across Shaw's Cove at a future date (but not as part of this MDP). At the south end of the peninsula, the Riverwalk will link with the Pfizer complex entrance (including their public access waterfront walkways), and with Pequot Avenue, which provides sidewalk access to the Marina District, and other waterfront sites in south New London. Bicycle access along City streets will connect with the City's Ocean Beach Park.

5.4.7 Solid Waste Disposal

The individual development parcels will contain enclosed solid waste devices for the use of that complex. Compacted solid waste will then be removed, in covered vehicles, to a solid waste disposal facility.

5.4.8 Estimated Cost of Site/Infrastructure Improvements

Table 5-4 summarizes the estimated construction costs for the redevelopment project. These estimated costs are subject to review and approval by DECD prior to project implementation as part of the MDP Funding Plan and Budget (see Section 8.0).

Table 5-4
Probable Costs for Infrastructure and Special Construction[1] [2]

	Infrastructure Item / Task	*Estimated Cost of Item / Task*
A	**Site Preparation**	$1,681,713
B	**Storm**	$1,419,789
C	**Water**	$383,876
D	**Sanitary**	$220,500
E	**Street Demolition**	$22,768
F	**Traffic Improvements**	$345,000
G	**Improvements to Existing Railroad Underpasses**	$720,000
H	**Street Construction**[2]	$749,799
I	**Curbs**	$441,760
J	**Sidewalks**	$627,191
K	**Street Lights, Street Trees, Amenities and Furnishings**	$2,926,775
	Infrastruture Items/Tasks A through K Subtotal	$9,539,171
	Contractor Mobilization, General Conditions OH&P(15%)	$1,430,876
	Contingency (10%)	$953,917
	Subtotal	$11,923,964
	Design (10%)[3]	$1,192,396
	1998 Costs Escalated to Year 2000 (4% per year)	$972,995
	Infrastructure Items/Tasks Total	$14,089,356
	Special Construction Item / Task	*Estimated Cost of Item / Task*
L	**Enhancement & Buffer Plantings at WWTF**[4]	$897,500
M	**Building Demolition**[5]	
	Residential/Commercial Properties	$3,608,675
	NUWC Site	$3,033,000
	Assumed Utility Demolition	$750,000
N	**Site (soils) and Building (lead paint/asbestos) Remediation**[6]	---
O	**Site (development parcels) Cost Premiums**	$612,600
	Special Construction Items/Tasks L through O) Subtotal	$8,901,775
	Contractor Mobilization, General Conditions OH&P(15%)	$1,335,266
	Contingency (10%)	$890,178
	Subtotal	$11,127,219
	Design (10%)[3]	$1,112,722
	1998 Costs Escalated to Year 2000 (4% per year)	$907,981
	Infrastructure Items/Tasks Total	$13,147,922
	INFRASTRUCTURE AND SPECIAL CONSTRUCTION ITEMS/TASKS TOTAL	$27,237,277

1 Estimate excludes all land and the following soft costs: land acquisition, relocation, legal, administrative, owner's insurance, permits & fees, construction interest, finance/bonding costs marketing, etc.

2 Street construction and streetscape costs based on the following design assumptions. Arterial St.: 12' traffic lanes; 5' shoulder/bike lane, each side; 6' concrete sidewalks; 35' high light standards @ 150' O.C., both sides; street trees @ 75' O.C., both sides. Collector St: 12' traffic lanes; 5' shoulder/bike lane, each side; 5' concrete sidewalks; 20' high light standards @ 60' O.C., both sides; street trees @ 40' O.C., both sides. Local St:12' traffic lanes; 5' shoulder/bike lane, each side; 5' ornamental precast concrete pavers sidewalks; 12' high light standards 42' O.C., both sides; street trees @ 28' O.C., both sides.

3 This 10% design number is factored onto General Conditions and contingency numbers as well as hard construction costs and therefore is deemed adequate in size to cover design fees that may exceed 10% for some components of work. The design fee also assumes NLDC pays for all design, including design work that may be reimbursable by utility companies.

4 Enhancements and buffer plantings along perimeter of the WWTF per CDM Facilities Planning Study of November 1998 and CUH2A Cost estimate of August 1998; excluding the treatment of the waterfront and aesthetic improvements internal to the WWTF. These costs will be paid by the City under a separate budget or authorization.

5 Excludes the following: asbestos; lead abatement; removal of underground tanks; hazardous materials and soils removal, remediation and disposal. All clean fill to remain on site as clean backfill (i.e. concrete and brick). Site to be assembled as a whole allowing for demolition to be performed as one contiguous site.

6 Refer to estimate provided by HRP.

5.5 Evacuation Process

A detailed evacuation plan will be developed and approved by the City of New London prior to occupancy of structures within Parcels 1, 2, and 3. The preferred evacuation route is via Walbach and Nameaug Streets, exiting the peninsula via Pequot Avenue or Howard Street (see Figure 4, Section 1.3). Access/egress during flooding events is being provided on evacuation streets that have an elevation of 7.1 feet NGVD or higher. This places the entire evacuation route above the 10-year flood. The 10-year FEMA flood level standard is 7.1 feet NGVD, which is 0.7 feet higher than the Army Corps of Engineers 10-year flood level of 6.4 feet. The 50-year flood elevation is 9.0 feet NGVD, and the 100-year flood elevation standard is 10.0 feet NGVD. A berm of 8.0 feet NGVD will be maintained east of the Pequot/Howard Street underpass, ensuring that storm flooding to that level from Bentley Creek and/or Trumbull Street will be kept clear of the underpass.

During a hurricane storm event approaching the 100 year storm, it is possible that portions of the streets between 7.1 feet and 10.0 feet in elevation will be subject to flooding. This flooding would only occur if the storm arrival is coincident with the timing of a spring high tide. In the event of flooding of this type, emergency vehicles are capable of operation in streets that are inundated by up to 2 feet of water. The 100 year storm flooding could result in the lowest portions of the evacuation streets that are impassable to some vehicles for as long as one hour and 35 minutes, and will be impassable to emergency vehicles due to flooding in excess of two feet for as long as 50 minutes out of the 12 hour cycle.

The evacuation plan will address the following required elements:

- Monitoring. Coastal weather systems and hurricane tracking, as well as storm notices of the Office of Emergency Management
- Implementation. Criteria for requesting evacuation of peninsula, such as prediction of coastal tidal flooding exceeding elevation of 8' within 12 hours
- Evacuation Areas. Maps of areas to be evacuated based upon potential coastal flood hazards.
- Evacuation Routes. Clearly designated and marked evacuation routes with appropriate signage.
- Storm Shelter Designation.
- Warnings and Notification. The mechanism for issuing the evacuation notice to and by the media (TV, radio, newspaper), by speaker equipped public safety vehicles and by siren.
- Special Assistance/Needs. A list of residents in the evacuation areas who may need special assistance due to age, handicap, etc.
- Criteria for securing evacuated area, and for ensuring safe return (checking for gas leaks, downed power lines, clear streets, etc.)
- Memorandum of Understanding with USCG Station located on the peninsula regarding shared emergency resources during storm situations.

* * *

9.0 ADMINISTRATIVE PLAN

The NLDC or other eligible entity designated by the City of New London shall be responsible for administering the Fort Trumbull Municipal Development

Plan, subject to the terms and conditions of that Plan, including the EIE completed in accordance with the CEPA, and all applicable prescribed laws and regulations governing this project. The duties of the NLDC will include:

1. Coordination of project management and approvals with the State of Connecticut, Departments of Economic and Community Development and all other State, Federal, and local agencies as required.
2. Acquisition of property.
3. Issuance of contract(s) for asbestos removal, demolition, site preparation, abatement, and remediation.
4. Relocation of affected residents and businesses.
5. Coordination of demolition and site preparation with the appropriate State and City agencies.
6. Marketing and advertising for development/site proposals.
7. Entering into contracts for design and execution of project improvements.
8. Transfer of the site to the designated redeveloper(s).
9. Administration of appropriate financial transactions and reports.
10. All day to day project administration.
11. Maintenance of all necessary records, including relocation records.
12. General project management and reporting to DECD as required on program.

The above will be carried out by the New London Development Corporation staff; enhanced as needed by consulting engineers, legal counsel, etc. and temporary relocation staff. A project management plan, including roles of NLDC staff and consultants, will be prepared for DECD approval.

APPENDIX A

SELECTION OF AND RATIONALE FOR THE PREFERRED ALTERNATIVE – FORT TRUMBULL MDP AREA

New London, Connecticut
February 1999

Submitted to the State of Connecticut
Department of Economic and Community Development
February 1999

Submitted by the
New London Development Corporation

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1.0. Overview

This document is intended to support the *Record of Decision* (ROD) for the Draft Environmental Impact Evaluation (*DEIE*) of the Fort Trumbull MDP Area in New London, Connecticut. Six-land use alternatives were extensively evaluated in the *DEIE*, however a preferred alternative was not selected. The following discussion presents the preferred alternative and describes the rationale for its development.

New London and the Fort Trumbull Project

The New London Development Corporation (NLDC), in association with the Connecticut Department of Economic and Community Development (DECD), is undertaking a municipal development project adjacent to the Thames River in New London, Connecticut.

The project area is located in the southeast part of New London, encompassing approximately 90 acres of primarily public utility, residential, and commercial areas. Figure 1 is a location plan of the Fort Trumbull area. This area includes the U.S. Navy's closed Naval Undersea Warfare Center (NUWC) along the Thames River, the regional Water Pollution Control Facility (WPCF), and the adjacent Fort Trumbull area, including all or portions of Howard, Hamilton, Shaw, Harris, Trumbull, Walbach, Nameaug, Smith, Chelsea, Goshen, and East Streets, and Pequot Avenue. The project area includes approximately 115 parcels. The NUWC site alone is 32 acres.

The Fort Trumbull area has been targeted for evaluation under the municipal development planning process for numerous reasons. The majority of structures in the area are in relatively poor condition, exhibit a high amount of functional obsolescence, and have limited market potential. Vacancy rates are notably high (82% vacancy of non-residential buildings and 20% vacancy of residential units at the time of preparation of the *DEIE*). Tax revenues in the MDP area (±$325,000) are quite low considering it comprises an area of 90 acres.

A 790,000 square foot global development facility proposed by Pfizer, Inc. (to be located immediately to the south and outside of the MDP area) and reuse of a portion of the NUWC site for development of a state

park, creates an opportunity for improvement of the Fort Trumbull area consistent with these planned projects. This also presents opportunities to stimulate the local economy, improve waterfront access along the Thames River, make aesthetic and visual improvements, and complement ongoing downtown revitalization efforts.

Plans for the project area will be prepared in accordance with a Municipal Development Planning process under Section 130, 132, and/or 588(1) of the Connecticut General Statutes.

Fort Trumbull Project Goals

In April of 1998, the New London City Council created a committee of six people (two from the Local Reuse Authority (LRA), two from the NLDC and two from the State of Connecticut) to evaluate the Local Reuse Authority (LRA) plan for the disposition of the NUWC property and to consider asking for a delay in the public sale of a portion of this property. The committee identified the following goals for the Fort Trumbull area:

1. To create a world-class development that will complement the undertakings of Pfizer, Inc. and set a standard for development in New London.
2. To create an economic asset for the City of New London that will create jobs, generate tax revenue, and result in spin-off economic activity.
3. To maximize public access to the waterfront and, in doing so, encourage uses which are water dependent or which will be enhanced by water access and views.
4. To develop a project which will help build momentum for the revitalization of downtown New London and the balance of the city to the benefit of the city's residents and visitors.

Three of the four project goals relate either directly or indirectly to economic development. As such, this is a founding principle of this project. These goals were carried through the planning and evaluation of alternatives and selection of the preferred alternative. The preferred alternative strives to promote economic development, while maximizing public access to the waterfront, encouraging water dependent and related uses, and minimizing negative environmental impacts.

2.0 Overview of Draft Environmental Impact Evaluation Land Use Alternatives

The Draft Environmental Impact Evaluation (DEIE) evaluated six land use alternatives with an array of land uses. While there is some overlap and common elements in the six land use alternatives, each has a distinct theme as noted below:

Alternative No. 1 – No Action

Alternative No. 2 – Recreation/Tourism

Alternative No. 3 – Residential/Commercial

Alternative No. 4 – Business Campus

Alternative No. 5 – Mixed Use 1

Alternative No. 6 – Mixed Use 2

The analysis contained in the DEIE evaluated the impact of the various components associated with the six land use plans. It was recognized that the ultimate preferred alternative could borrow land use components from any or all of the plans. As stated on page 3-5 of the *DEIE*:

"The alternative plans represent general land use areas and density of development. They are not intended to be exact geographic limits or configurations. A preferred alternative has not been selected and it is anticipated that the ultimate selected preferred plan may be a hybrid of several alternatives."

A brief description of the six alternatives follows.

Alternative 1 – No Action – One of the requirements of CEPA is to evaluate a no action alternative. In this particular instance, no action is somewhat unusual in that some activities and plans would likely proceed by others even if there were no MDP action.

Under the no action scenario, it is assumed that the Navy would proceed with disposition of the NUWC property as planned prior to the introduction of the MDP process, in accordance with the approved Local Reuse Authority's (LRA) preferred plan. The LRA's preferred plan indicated disposition of the NUWC property through conveyance of the southern portion to the Department of Environmental Protection for future development of a state park, public benefit conveyance of a portion of the property near Columbia Cove for maritime uses, and public sale of the remaining area.

Alternative 2 – Recreation/Tourism – The intent of this alternative was to complement the proposed Fort Trumbull State Park, concentrating recreational, educational, and cultural uses east of the railroad in the Fort Area and at NUWC. Office and retail uses are proposed west of the railroad in the Gateway Area.

Alternative 3 – Residential/Commercial – This alternative highlights a residential component throughout the MDP area, intermixed with the state park and open space recreational areas, and minor

amounts of office and retail uses proposed in the Gateway Area.

Alternative 4 – Business Campus – This alternative focuses the majority of land use in the form of office campus and a supporting hotel/conference center, with small amounts of retail and residential uses in the Gateway Area.

Alternatives 5 & 6 – Mixed Use 1 & 2 – These two mixed use alternatives incorporate recreational, residential, commercial office, retail, and hotel/conference uses in different proportions and arrangements.

3.0 Rationale for Selection of the Preferred Alternative

Following the 45 day review and comment period of the Draft Environmental Impact Evaluation for the Fort Trumbull MDP area, review of public and state agency comments, and consideration of the administrative record, technical data and other relevant information, a preferred alternative was selected. This alternative is a composite of positive elements of Alternatives 2, 4, 5, and 6. The four goals identified for this project which highlight economic development through the creation of jobs, tax revenues and spin-off economic activity, played a major role in the ultimate selection of the preferred alternative.

DEIE Alternative 4 (*Business Campus*) represents the greatest economic development potential of the five action alternatives. It also results in the greatest impacts to traffic, generates the greatest percentage of impervious cover, has the highest construction costs, and was considered to be the least complementary with respect to the planned State Park facility and other nearby waterfront uses. The residential and recreational alternatives (*DEIE* Alternatives 2 and 3)

were considered with respect to environmental impacts as well as their ability to meet the project goals. Although these alternatives have lower associated construction costs and have lesser traffic and relocation impacts, they do not generate the economic development desired for this project, and in their pure form are not consistent with the State Conservation and Development Plan or local land use policies.

Residential and recreational land uses as components of an urban center, however, have numerous benefits. Residential uses can provide an essential element to an urban community center. The City of New London has an abundance of lower income housing and rental units, with a shortage of moderate to high range housing. At the same time, the jobs created by the Fort Trumbull MDP project, coupled with those to be created by the nearby Pfizer development, will generate a greater demand for moderate and higher-end urban dwellings located in close proximity to the workplace.

It is estimated that in this relatively small City, 5.79 square miles in size, only about seven percent of the City's vacant land is available for residential development. A good portion of this vacant land, however, has serious development limitations. The City has experienced a decline in both population, since 1960, and employment, since 1970. Additionally, it is estimated that only 37 percent of all of the housing units in the City are owner occupied.

Balancing the competing needs and impacts of this project led to the ultimate selection of a modified mixed use alternative. A compromise of economic development with environmental impacts resulted in an alternative which takes advantage of the economic potential of business development, coupled with the

positive aspects of a mixed use community development. The result is a positive outcome with fewer negative impacts.

The preferred alternative is depicted in Figure 2. Major elements of this composite plan are presented in Table 1 and are described in the ensuing text.

Waterfront Uses – Waterfront uses along Shaw's Cove, Columbia Cove, Bentley Creek, and the Thames River were maintained as presented in Alternatives 3 through 6, including the 16-acre State Park at the inactive NUWC site, the public riverwalk, and other water related commercial uses. These elements were retained in the preferred alternative for their contributions to waterfront access and water dependency. This emphasis on public access and water dependent uses is consistent with the identified project goals as well as state land use planning goals and the Connecticut Coastal Management Act policies.

TABLE 1
Preferred Alternative

Land Use Component	Description	DEIE Alternative Origin	Comments
State Park	16 acres	Alternatives 3, 4, 5, and 6	
Public Walkway	Project Perimeter	Alternatives 2, 3, 4, 5, and 6	
Columbia Cove Area	40-60 Slips	Alternatives 3, 4, 5, and 6	Reduced from 80-100 slips.
Water-Related Commercial	25,000-30,000 SF	Alternatives 2, 3, 4, 5 and 6	
Waterfront Commercial	20,000-25,000 SF	Alternatives 2, 3, 4, 5, and 6	
Gateway Office (Existing)	50,500 SF	Alternatives 5 and 6	
Gateway Office/Incubator	90,000 SF	Alternatives 5 and 6	
Gateway Retail	10,000 SF	Alternatives 5 and 6	
Fort Area Office/Incubator	90,000 SF	Alternative 4	Reduced from 375,000 s.f.
R&D/Office	5,000 SF	Alternatives 2, 3, 4, 5, and 6	
Hotel/ Conference Center	200-250 Rooms	Alternatives 5/6	
Athletic Club/Center	20,000 SF	Alternatives 5 and 6	
Park/Waterfront Support	2.4 acres	Alternative 2	
Residential Mid-Range Density	80-100 Units	Alternatives 3 and 5	Reduced from 115 units.

Office/Incubator Uses – The Gateway Area office/incubator use as proposed in *DEIE* Mixed Use Alternatives 5 and 6 was selected for its economic development potential, creation of direct and indirect employment, and generation of tax revenues which directly address the project goals. Additional Office/Incubator uses are proposed in the eastern portion of the Fort Area between the railroad and Smith Street as in Alternative 4. A small area of R&D/Office use is also proposed in the Lower Pequot Avenue Area, as in *DEIE* Alternatives 2 through 6. There is a potential for a small amount of residential use (approximately 20 units) along the western side of Smith Street as a transition between the residential and business uses. This use would replace approximately 30,000 square feet of the office/incubator use on this block.

Hotel/Conference Center – The Hotel/Conference center land use as presented in Alternatives 5 and 6 has been selected as a 200 to 250 room facility in the northern portion of the MDP area. The larger hotel facility was incorporated to support surrounding uses, including the Fort Trumbull State Park, planned office uses in the Fort and Gateway areas, as well as the nearby planned Pfizer offices to the south of the MDP area. The hotel would be near, but not directly on, the waterfront. The area surrounding the hotel would be developed as an urban village, linking the nearby business and residential uses.

Residential Uses – A smaller area of residential land use than that which was proposed in *DEIE* Alternatives 3, 5, or 6 is included in the preferred alternative to support the other uses in the area. This component is important to the concept of urban center revitalization, where residents can live and work in the same urban community. This concept is consistent with the goals presented in the *Conservation and Development*

Policies Plan for Connecticut with regard to prevention of urban sprawl. The residential component will also offset the impacts of traffic, impervious area, and cost associated with the business office development.

Support Uses – Additional support uses are proposed in the block defined by Smith, Walbach, East, and Trumbull Streets. These uses, an important component of which will be parking, will support the planned Fort Trumbull State Park and surrounding waterfront commercial uses. This block was identified in *DEIE* Alternative 2 as being a portion of the State Park, with similar intended uses.

4.0 Rationale for Selection of the Land Use Component Locations of the Preferred Alternative

Once appropriate and practical land uses were identified for the preferred alternative, the process of determining the most appropriate location for the various uses were initiated. This process involved an examination of numerous site characteristics, access, existing infrastructure, and regulatory requirements. For example, it is obvious that marina related activities should be located adjacent to the waterfront. However, this use must be balanced with the potential for environmental impact to aquatic resources. An attempt has been made to provide water low impact water dependent uses.

Office/incubator uses were concentrated in the Gateway and eastern Fort Areas for several reasons. First, these uses represent the most traffic-intensive aspects of the plan. Accordingly, they were sited in close proximity to existing roadway corridors such that convenient and efficient vehicular access is accomplished. Keeping the majority of these uses west of the railroad underpasses was also a priority, due to

the physical constraints caused by these structures. The remaining office uses were maintained closer to the main entrance to the Fort Area for the purpose of concentrating traffic away from the internal peninsula, therefore minimizing traffic impacts. These office uses are more compatible with the railroad and sewage treatment plant uses in the eastern Fort Area and will provide a screen for these less desirable site features.

Hotel and residential uses were placed in the western portion of the Fort and NUWC areas, away from the major concentration of traffic and utilities. These uses are not compatible in the western Fort Area adjacent to the sewage treatment plant and the active Amtrak railroad. The adjacency of these land uses to the planned Fort Trumbull State Park and hotel area was considered to be a more compatible match, creating more of an urban village effect. Additionally, residential uses will help to ensure around-the-clock activity, helping to keep the area watched and therefore safer. Other incidental uses as presented in Alternatives 5 and 6, including parking, an athletic club, and related hotel services would be located in the hotel/conference center area.

5.0 Potential Impacts of the Preferred Alternative

As described above, the preferred alternative is a composite of numerous alternatives which were evaluated in the *DEIE*. Therefore, the impacts are very similar to those previously assessed. Specific impacts are described below:

Land Use and Zoning Impacts – The preferred alternative is a mixed use alternative which incorporates elements most common to *DEIE* alternatives 4, 5, and 6. These uses are consistent with statewide

land use planning policies with respect to urban area regional centers, encompassing land areas containing traditional core commercial, industrial, transportation, specialized institutional services, and facilities of intertown significance. The office/incubator uses comprise a major component of the preferred alternative, representing a significant economic development feature. This is complemented by the hotel conference center and associated support uses, including an athletic club, waterfront amenities, and necessary parking. The residential component provides a buffer between the business uses and the proposed state park and public riverwalk. It also promotes a holistic urban community, where people can live and work in close proximity.

The proposed uses in the preferred alternative are generally consistent with local zoning regulations (Waterfront Commercial/Industrial, Waterfront Development District, and General Commercial District). Minor inconsistencies between proposed land use and zoning will be identified during the Municipal Development Planning process and will be adjusted as necessary during MDP implementation.

Consistency of the preferred alternative program elements with the Connecticut Coastal Management Act Policies has been addressed in the *DEIE* with respect to the existing regional water pollution control facility, Navy and Coast Guard facilities, and the proposed riverwalk, state park, and waterfront related commercial uses along Columbia Cove, Shaw's Cove, and Bentley Creek. These are described in detail in *DEIE* Section 4.2.1.

Socioeconomic Impacts – Socioeconomic impacts have been evaluated for all of the land use components of the preferred alternative. These components were evaluated in various combinations in the *DEIE*.

Table 2 presents this information for the preferred alternative.

TABLE 2
Summary of Socioeconomic Impacts for the Preferred Alternative

Category	Low Estimate	High Estimate
Construction Costs	$44,183,355	$73,947,010
Construction Wages	$19,882,510	$33,288,305
Construction Employment	518	867
Direct Employment	718	1,362
Indirect Employment	500	940
Tax Revenues Generated	$680,544	$1,249,843

The socioeconomic impacts of the preferred alternative are positive with respect to job creation (construction, direct, and indirect) and generation of tax revenues. When compared against the five action alternatives evaluated in the *DEIE*, direct employment of the preferred alternative is higher than that which was projected for Mixed Use Alternatives 5 and 6, but does not reach the high values forecast for the Business Campus (Alternative 4). The same is true for indirect employment. Construction employment of the preferred alternative is between that which was forecast for *DEIE* Mixed Use Alternatives 5 and 6. The same is true for tax revenues generated.

Neighborhood/Housing Impacts – Similar to DEIE Alternatives 2, 4, and 6, implementation of the preferred alternative would require the relocation of all 115 dwelling units in the MDP area. (DEIE Alternatives 3 and 5 retained a portion of the current housing stock.) The current dwelling units in the Walbach/Smith/Chelsea Street block would be replaced by

office/incubator uses. The existing dwelling units in the Walbach/East/Trumbull Street block would be replaced by parking and other support uses associated with the adjacent State Park and nearby waterfront commercial uses. These areas are not conducive for future residential uses due to their proximity to the railroad, areas of concentrated traffic, and the sewage treatment facility.

Residential and business relocation is necessary to meet the project goals as described. New residential development will occur in areas which do not currently support residential uses. None of the proposed residential uses will replace an existing residential use in the same location, with the possible exception of the western side of Smith Street, where a small amount of residential development may occur.

Less than 12% of residential buildings in the MDP area, interspersed throughout the different districts, are considered in average or better condition. Approximately 122,300 square feet of residential properties are considered in fair condition, representing 58% of the residential inventory. The remaining 63,800 square feet (30%) are in poor condition. These properties are similarly scattered throughout the MPD area contributing to a saw-tooth visual impression in the various blocks.

Since 1990, the existing buildings have undergone minimal private investment. In fact, portions of the MDP area appear to have suffered more from disinvestment and owners' neglect than improvements or upgrades. Slightly more than $925,000 in improvement costs, based on assessor's information, has been invested since 1990, and more than 60% of this amount has been for improvements to 14 non-residential buildings. Total improvement costs over these eight years, when compared to current assessments, equate to only

6% of total value. This indicates an average improvement cost of less than 1% of assessment per year, suggesting that many properties suffer from deferred maintenance.

The composition of the Fort Trumbull MDP area is reflective of the City of New London as a whole in that the majority of its residential dwellings are renter-occupied. As of February 19, 1999, 67 of the 115 dwelling units in the MDP area were occupied. Of these, only 15 were owner-occupied, with the remaining 52 renter-occupied.

Based on an analysis conducted for this project, available rentals in New London are plentiful. In an average weekly listing, between 15 and 20 one-bedroom units were listed for rent; 10 to 15 two-bedroom units were listed; 5 three-bedroom units were listed; and 5 studio/efficiency units were listed for rent in New London. In addition, the larger apartment complexes in the area advertised unit availability without providing unit characteristics.

Recent surveys indicate that there is also adequate availability of residential dwellings available for ownership in the greater New London area in a comparable price range to those in the MDP area. As of September 1998, just prior to *DEIE* publication, New London had 106 active residential listings. Waterford had 154 and Groton had 220. Average list prices for the three communities are $104,000, $168,100, and $194,000 respectively. A review of published real estate listings in New London showed 19 homes for sale under $70,000 and 23 homes for sale between $70,000 and $90,000.

Extensive mitigative measures have been proposed to offset projected impacts. In July of 1998, the *Relocation Plan for the Fort Trumbull Area Municipal*

Development Project was developed in conjunction with this project. The Plan conforms with the Uniform Relocation Assistance Act (URAA). Since that time, NLDC has been acquiring properties and relocating individuals and businesses in the MDP area on a voluntary basis.

The purpose of relocation services and assistance is to provide displaced households with an orderly, timely, and efficient move, and to keep them informed of services and payments that are available. Relocation services and assistance will be administered by the New London Development Corporation (NLDC) through a relocation consultant. A relocation counselor representing the NLDC is assigned to assist all displaced households in finding a suitable replacement dwelling. To date, this process has been successfully carried out with those individuals who have voluntarily expressed an interest in relocating.

Future acquisition and relocation will be undertaken to ensure the availability of resources to accommodate displacees. This careful management of the redevelopment process will ensure availability of resources. The relocation process will be accomplished by the New London Development Corporation with assistance from others as appropriate. The relocation of site occupants will comply with the Uniform Relocation Assistance Act (Chapter 135 Connecticut General Statutes), the *Relocation Location Plan for the Fort Trumbull Area Municipal Development Project* (July 1988), and local procedures. The purpose of the Uniform Relocation Act is to establish a uniform policy for the fair and equitable treatment of all persons displaced by state and local real property acquisition projects. Any individual, family, or business displaced by this project will be offered relocation assistance services for the purpose of locating a suitable replacement property.

In addition to relocation assistance under the URAA, $10 million of Connecticut Housing Finance Authority (CHFA) low rate financing loans will be available to help residents that may be dislocated during or following any proposed redevelopment. The funds will be offered at a rate which is 0.25 percent lower than CHFA's usual rate in first mortgage financing and can be used by renters and owners to purchase and rehabilitate homes. An additional $250,000 will be available in downpayment assistance for relocated homeowners. The Small Business Assistance Program will also be available, with $250,000 to help small businesses which will be displaced.

Most recently, a Social Equity Committee has been formed to bring together a variety of local human service organizations to meet the needs of individuals in the City. This group consists of members from the City Department of Health and Social Services, Creative Connections, and other social service agencies to work together on various aspects of difficult relocations.

Public comments regarding relocation impacts were received from several individuals living within the MDP area. These are addressed in the *Response to Public Comments* section of the *Record of Decision*.

Community Facilities and Services Impacts – These impacts, many of which are positive, would be essentially identical to those described under *DEIE* Alternative 5. No negative impacts are anticipated with respect to educational facility needs, since there is a projected decrease in school aged children in the project area (based on density of proposed residential development). Fire and police protection, health care, and recreation would be as described under *DEIE* Section 4.5.1.

Aesthetic/Visual Resource Impacts – Aesthetic and visual impacts for the preferred alternative would be positive. The aesthetic features described for the pertinent components of DEIE Alternatives 4, 5, and 6 would apply to the preferred alternative.

Public Utilities and Services Impacts – The common elements discussion in *DEIE* Section 4.7.1 applies to the preferred alternative. Water supply demands and sewage generation would be in the range as defined for Alternatives 4, 5, and 6. Water demands would be less than historic usage in the Fort Trumbull area and approximately equal to existing estimated usage in the area. The same is true for sewage generation. Neither utilities would be negatively impacted by the project.

Cultural Resource Impacts – These impacts will be as described in *DEIE* Section 4.8.5.

Traffic and Parking Impacts – Traffic generation of the preferred alternative will be approximately equivalent to levels which were projected for Mixed Use Alternative 6, with similar levels of service (mostly LOS A and B).

Water Resource Impacts – These impacts will be as described in *DEIE* Section 4.10.

Flood Hazard Impacts – Flood hazard impacts to the common elements of the preferred alternative will be as described in *DEIE* Section 4.11.1. Flood impacts as described for the pertinent components of *DEIE* Alternatives 4, 5, and 6 would apply to the preferred alternative. Additionally, the following points are noted:

- Under the preferred alternative, fewer numbers of people would reside in the flood prone Fort Trumbull MDP area than currently do;

- Stormwater drainage and associated flooding impacts will be improved under the preferred alternative, most notably at the railroad underpasses;
- A flood evacuation plan will be developed to reduce the safety risk of flooding to residents;
- The Fort Hill area on the future State Park property will serve as a point of refuge during a flood event;
- New housing will be elevated such that the habitable levels will be located above the 500-year flood elevation. It is not known at this time whether elevation will be accomplished by the placement of fill or by structural methods. This will be determined by the ultimate developer of the site. Specifically, the lowest floor (including basement and utilities) of all new construction of non-residential structures will:

  (i) have the lowest floor (including basement) elevated to or above the base flood level; or

  (ii) together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capacity of resisting hydrostatic and hydrodynamic loads and affects of buoyancy.

River estuaries, such as the Thames River can be subject to two types of flooding: riverine runoff and coastal storm surges that raise tide levels along the shore to create wave run-up. The Thames River does not have significant freshwater runoff related flood

problems due to its large width and depth. The principal concern is thus coastal flood hazards.

It is noted that many of the factors listed for consideration in Statute Section 25-68d and the Flood Management Regulations for State Agencies Section 25-68h-1 apply mainly to riverine inland floodplains rather than coastal areas. Additionally, the Fort Trumbull area does not support significant inland or tidal wetlands, nor are there any riparian forests or rare or endangered species. The following points are noted, based upon Section 25-68d(b) of the Statutes and Floodplain Management Regulations:

1. The project does not obstruct flood flows as it is in a coastal area without a floodway.
2. The project does not affect floodwater storage or flood control functions of the floodplain.
3. It does not cause an adverse change in flood flow velocities.
4. There is no impact to upstream or downstream properties because it is a coastal area.
5. There are no stream channel encroachment lines.
6. The buildings will be raised above FEMA and DEP flood elevation requirements.
7. The area is sheltered from wave activity.
8. The utilities will be raised and/or flood-proofed.
9. The City of New London currently has a Department of Civil Preparedness that, in conjunction with the New London Fire and Police Departments, has the ability to organize timely and appropriate response to emergency situations, including floods. The City also has the ability to provide shelter through the aid of the New London Chapter of the American Red Cross. Flood monitoring and warning capabilities will be expanded for the Fort Trumbull MDP area following development and implementation of a project-specific emergency evacuation plan.
10. Coastal access is being provided via the public walkway.
11. The fill will be protected from erosion.
12. The site is not on or near a barrier beach.
13. Stormwater management practices will be used to protect and improve water quality.

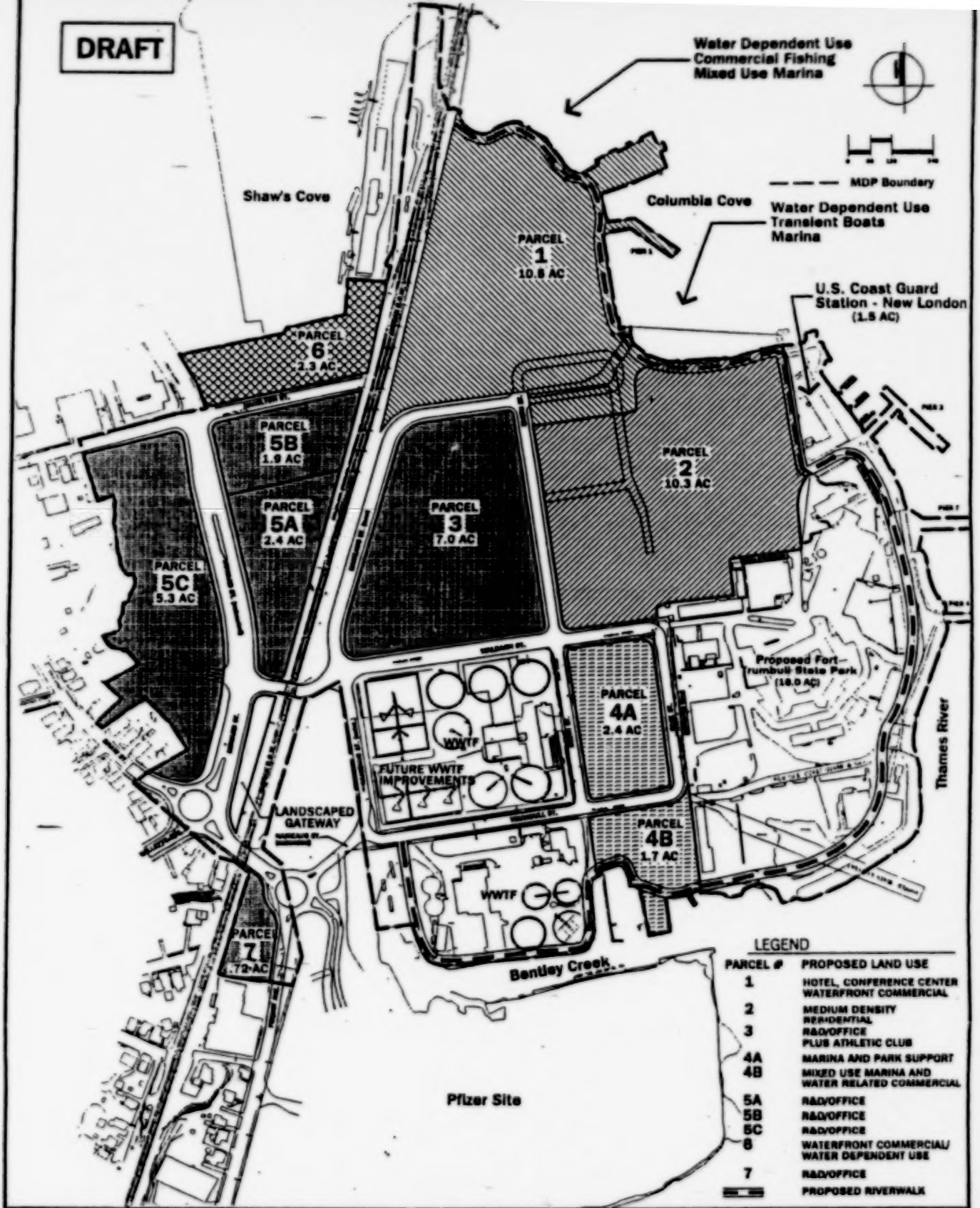
Biological Environment Impacts – These impacts will be as described in *DEIE* Section 4.12.6.

Physical Environment Impacts – These impacts will be as described in *DEIE* Section 4.13.

Air Quality Impacts – These impacts will be as described *in DEIE* Section 4.14.

Noise Impacts – These impacts will be as described in *DEIE* Section 4.15.

Solid Waste and Hazardous Materials Impacts – These impacts will be as described in DEIE Section 4.16 (general discussion) and in DEIE Subsections 4.16.4 through 4.16.6. Placement of residential land uses will require that the residential criteria remediation standards be met.



PROPOSED LAND USES

5.1

FORT TRUMBULL MUNICIPAL DEVELOPMENT PLAN

CITY OF NEW LONDON, CONNECTICUT

Prepared for: New London Development Corporation

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